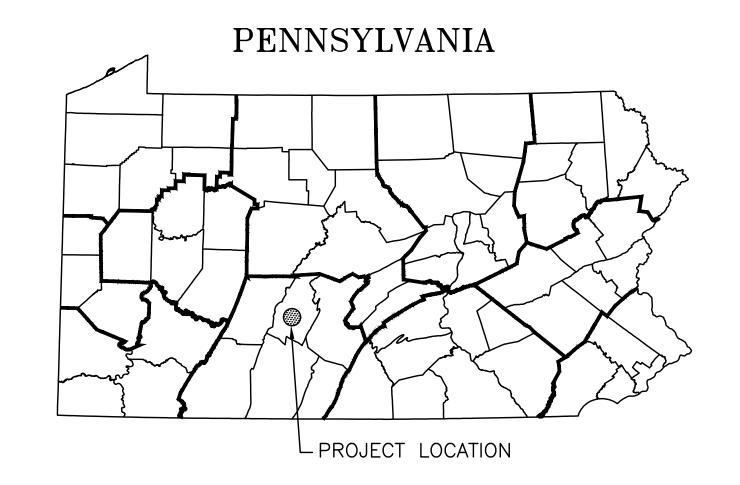
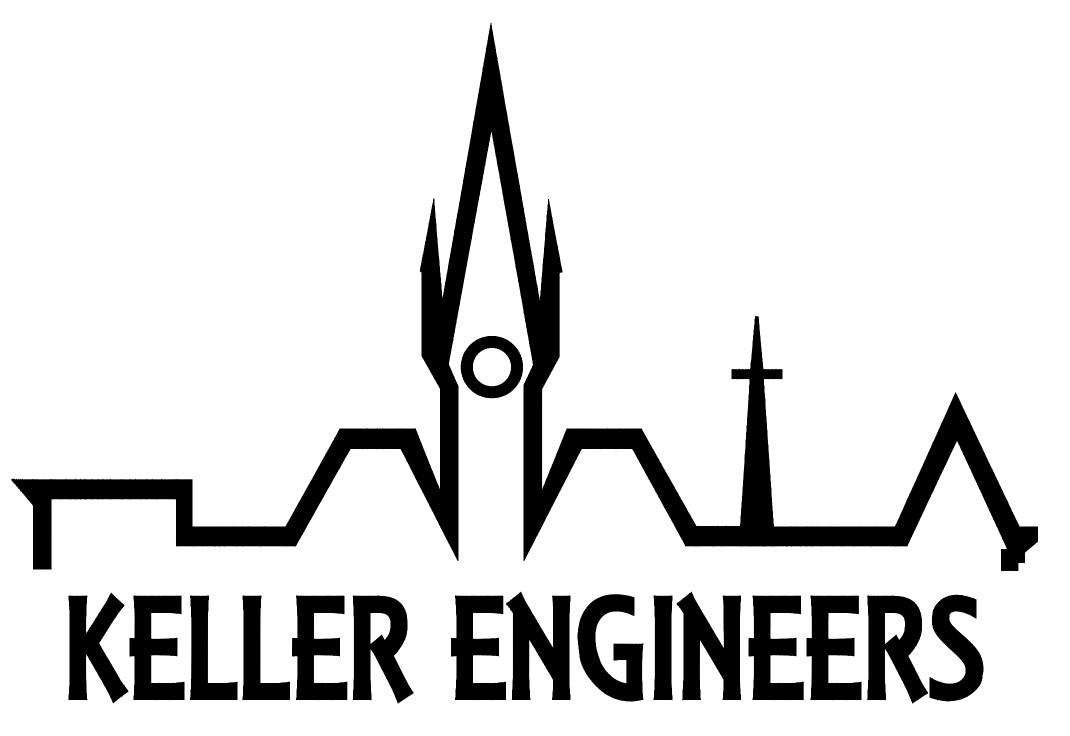
FINAL LAND DEVELOPMENT PLANS NEW SENIOR LIFE FACILITY FOR ALTOONA ADC PROPERTIES ASSOCIATES, LLC

CITY OF ALTOONA, BLAIR COUNTY PENNSYLVANIA

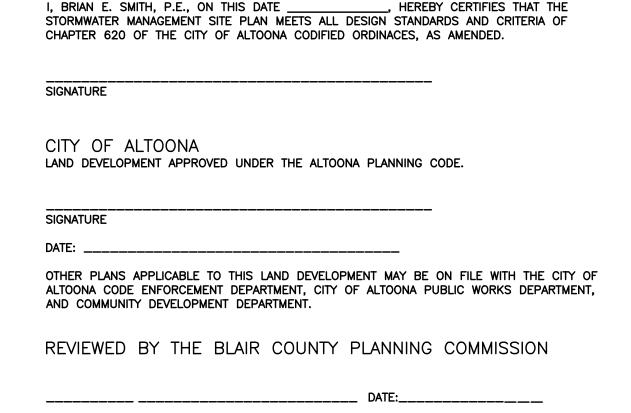




HOLLIDAYSBURG • STATE COLLEGE

MAINTENANCE OWNERSHIP AND MAINTENANCE OF THE STORMWATER MANAGEMENT FACILITIES FOR THIS PROJECT WILL BE THE RESPONSIBILITY OF THE SITE DEVELOPER. REGULAR MAINTENANCE IS NEEDED INITIALLY AFTER CONSTRUCTION AND CONTINUING INSPECTION AND MAINTENANCE IS REQUIRED TO ASSURE PROPER OPERATION OF ALL STORM SEWERS. INSPECTION AND MAINTENANCE SHALL FOLLOW THE MAINTENANCE PLAN. THE OWNER OF THE STORMWATER MANAGEMENT FACILITIES SHALL KEEP A RECORD OF THE SCHEDULED MAINTENANCE, ALL ACTIVITIES UNDERTAKEN IN COMPLIANCE WITH APPROVED MAINTENANCE SCHEDULE, AS WELL AS ANY OTHER MAINTENANCE ACTIVITIES THAT WERE THE STORMWATER OFFICER OR ANY DULY-AUTHORIZED REPRESENTATIVE OF THE CITY MAY ENTER AT REASONABLE TIMES UPON THE PROPERTY TO INVESTIGATE, INSPECT, OR ASCERTAIN THE CONDITION OF THE STORMWATER STRUCTURES AND FACILITIES OF THE SUBJECT PROPERTY IN REGARD TO ANY ASPECT REGULATED BY THIS CHAPTER. I HEREBY ACKNOWLEDGE THE STORM WATER MANAGEMENT SYSTEM TO BE A PERMANENT FIXTURE OF THIS PROPERTY THAT CAN BE ALTERED OR REMOVED ONLY AFTER APPROVAL BY THE CITY ENGINEER OF A REVISED PLAN. DEVELOPER ACKNOWLEDGEMENT _______ CERTIFICATION OF OWNERSHIP COMMONWEALTH OF PENNSYLVANIA SS: COUNTY OF BLAIR ON THIS ___ DAY OF ____, 20__ BEFORE ME, THE UNDERSIGNED OWNER/OFFICER PERSONALLY ______WHO, BEING DULY SWORN ACCORDING TO LAW, DEPOSE AND SAY THAT HE/SHE IS THE OWNER AND/OR EQUITABLE OWNER OF THE PROPERTY SHOWN ON THIS PLAN, AND THAT THEY ACKNOWLEDGE THE SAME TO BE THEIR ACT AND PLAN, AND DESIRE THE SAME TO BE RECORDED AS SUCH, ACCORDING TO LAW. OWNER _____ NOTARY PUBLIC _____

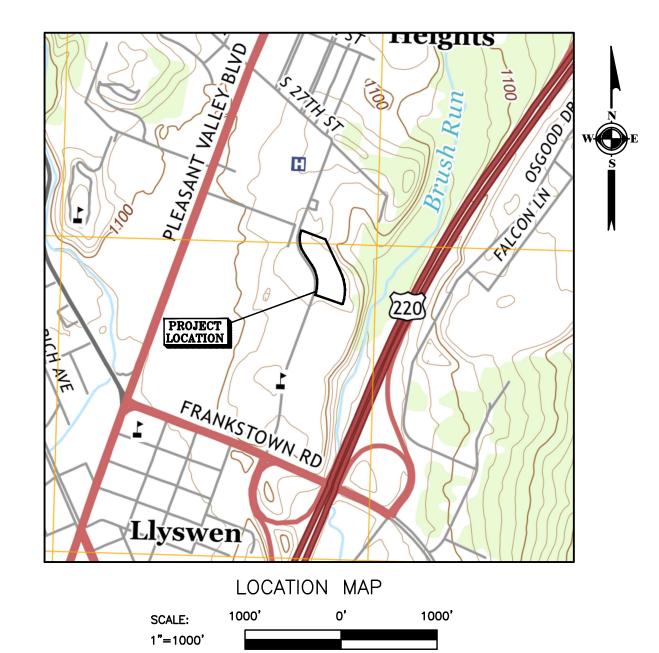
MY COMMISSION EXPIRES _____



ENGINEERS CERTIFICATION

	DRAWING INDEX	
SHEET	TITLE	REVISION
1	TITLE	
2	INDEX	
3	SITE PLAN	
4	GRADING PLAN	
5	UTILITY PLAN	
6	LIGHTING PLAN	
7	PROFILES/UTILITY EXTENSIONS	
8	DETAILS	
9	DETAILS	
10	DETAILS	
11	DETAILS	
ES1	E&S PLAN	
ES2	E&S NOTES	
ES3	E&S DETAILS	
PC1	PCSM LANDSCAPE PLAN	
PC2	PCSM PLAN	
PC3	PCSM NOTES & DETAILS	

EQUITABLE OWNER/DEVELOPER ALTOONA ADC PROPERTIES ASSOCIATES, LLC 209 SIGMA DRIVE PITTSBURGH, PA 15238



PENNSYLVANIA STATE UTILITY ACT LIST PENNSYLVANIA ONE CALL SERIAL #20203520789

THREE DAYS PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL NOTIFY ALL UTILITIES OF THE PENDING CONSTRUCTION AND NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM AT 1-800-242-1776 OR THE COMMON GROUND ALLIANCE NATIONAL ONE-CALL AT 811.

THE CONTRACTOR SHALL LOCATE, BOTH IN PLAN AND ELEVATION, ALL EXISTING UTILITIES AND SERVICES WITHIN THE AREA OF CONSTRUCTION, COMPLY WITH THE UNDERGROUND UTILITY LINE PROTECTION LAW, ACT OF 1974, P.L. 852 NO. 287, DATED DECEMBER 12, 1991.

THE FOLLOWING UTILITIES ARE ON THE PA ONE CALL WEBSITE AS HAVING FACILITIES IN THE CITY OF ALTOONA, BLAIR COUNTY, PA

DOMINION PEOPLES ALTOONA DIVISION 100 E BELLWOOD AVE ALTOONA, PA. 16602

DOMINION PEOPLES DESIGN ALTOONA 100 EAST BELLWOOD AVENUE ALTOONA, PA. 16602

ATLANTIC BROADBAND LLC 2200 BEALE AVENUE ALTOONA, PA. 16601

VERIZON PENNSYLVANIA INC 11TH FLOOR STRAWBERRY SQUARE HARRISBURG, PA. 17101

FIRSTENERGY CORP 405 W PLANK RD ALTOONA, PA. 16602

ALTOONA WATER AUTHORITY 900 CHESTNUT AVENUE ALTOONA, PA 16601



L	B	S,	Ø.		8 BR		TO TOTAL
				CITY COMMENTS/NPDES SUBMISSION/BIDDING	MISC. REVISIONS/CODE SUBMISSION	REVISION DESCRIPTION	
				3/23/21 AJL	2/22/21 AJL	DATE & INITIALS	

GENERAL NOTES: 1. PROPERTY IS CURRENTLY OWNED BY CHRISTA BETH WILLIAMS ET AL AS RECORDED IN

BLAIR COUNTY INSTRUMENT NUMBER 201409785 AND INDEXED AS TAX PARCEL NO 1.14-48-1.

TOPOGRAPHIC INFORMATION, PROPERTY LINES, AND RIGHT-OF-WAY LINES ARE BASED

- UPON A SURVEY DRAFT FOR ALTOONA ADC PROPERTIES, LLC AS PREPARED BY KELLER ENGINEERS DATED DECEMBER 2020 INDEXED AS PROJECT NO. 4199-2.
- 3. HORIZONTAL CONTROL IS BASED ON NAD 83— PENNSYLVANIA STATE PLAN COORDINATE SYSTEM (SOUTH ZONE). VERTICAL CONTROL IS BASED UPON NAVD 88.
- B. DEVELOPMENT TIMETABLE
 OBTAIN MUNICIPAL APPROVAL: SPRING 2021
 BEGIN CONSTRUCTION: SPRING 2021
 COMPLETE CONSTRUCTION: FALL 2021
- 5. THE PROPERTY CONSISTS OF 21.412 ACRES
- 6. THE DEVELOPMENT IS ZONED RU— URBAN RESIDENTIAL.
- 7. THE PROPOSED USE OF THE DEVELOPMENT IS HEALTH SERVICES
- 8. BUILDING SETBACK DISTANCES: FRONT = 3'
 - SIDE = 3'
 REAR = 15'
- 9. MAXIMUM ALLOWABLE BUILDING HEIGHT = 150'
- 10. PROPOSED BUILDING HEIGHT = 20' MAX.
- 11. BUILDING OCCUPANCY = 193 PEOPLE
- 12. PARKING GENERATION:

 HEALTH SERVICES: 1 SPACE PER 300 SF

 TOTAL SPACES REQUIRED = 50 (15,100 SF BUILDING FLOOR AREA)

 TOTAL SPACES PROVIDED = 79

 HANDICAP ACCESSIBLE PARKING = 4 SPACES

 BIKE SPACES REQUIRED = 8

 BIKE SPACES PROVIDED = 9
- 13. DENSITY CALCULATIONS: EXISTING PROPOSED

 OPEN SPACE 21.31 ACRES (99.96%) 20.23 ACRES (94.4%)

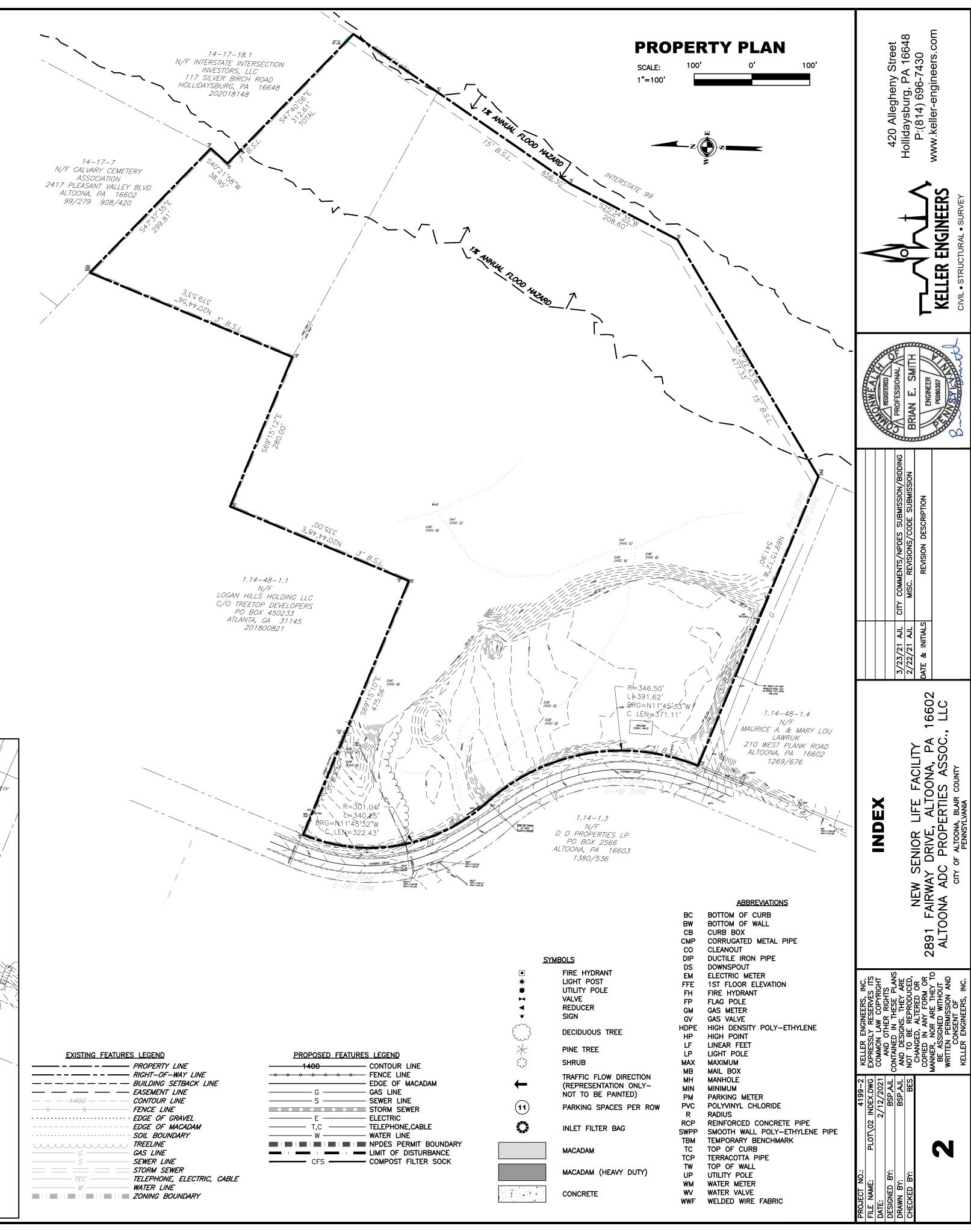
 PAVEMENT 0.10 ACRES (0.04%) 0.85 ACRES (4.0%)

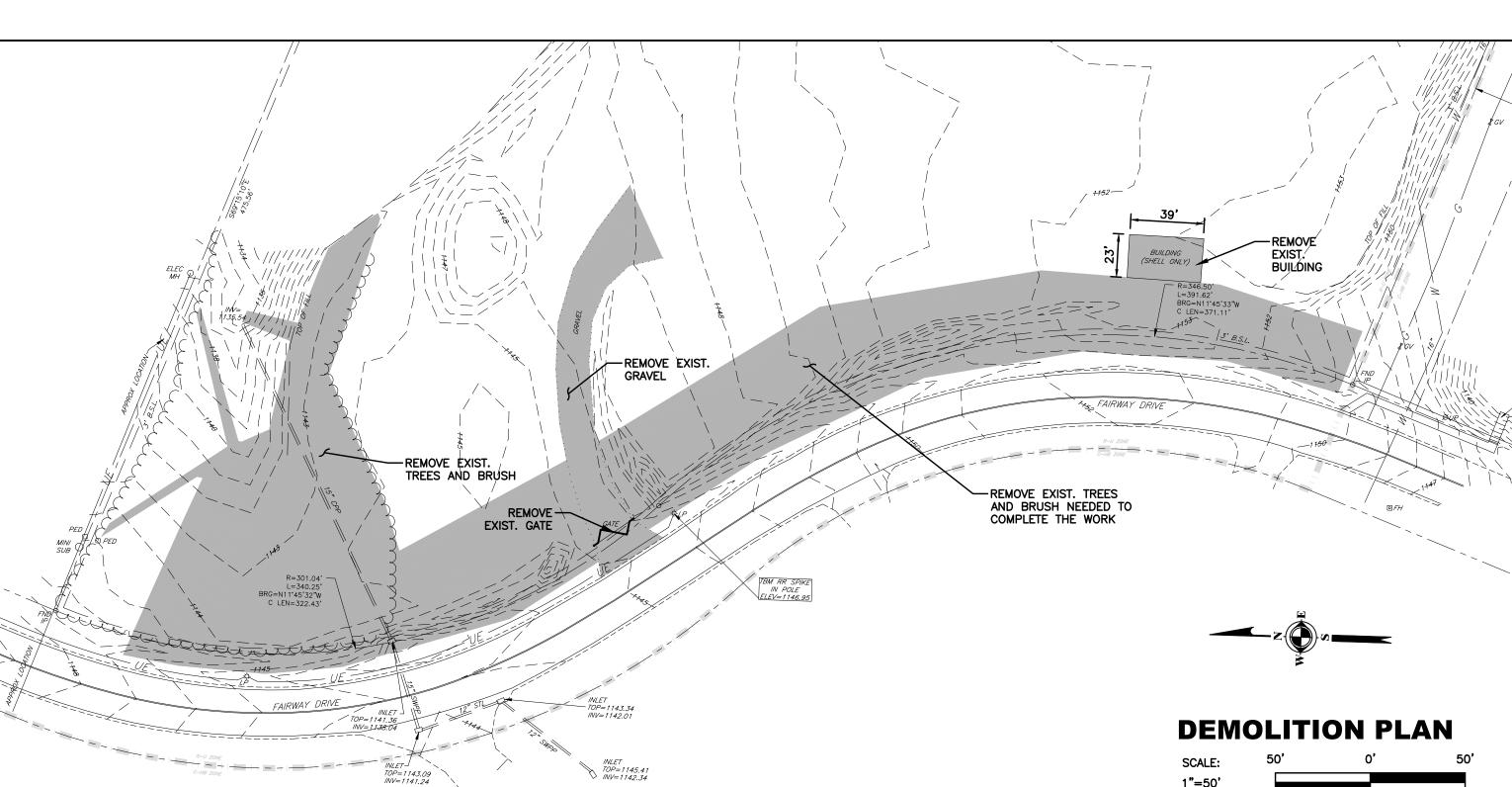
 BUILDING 0 ACRES (0%) 0.35 ACRES (1.6%)

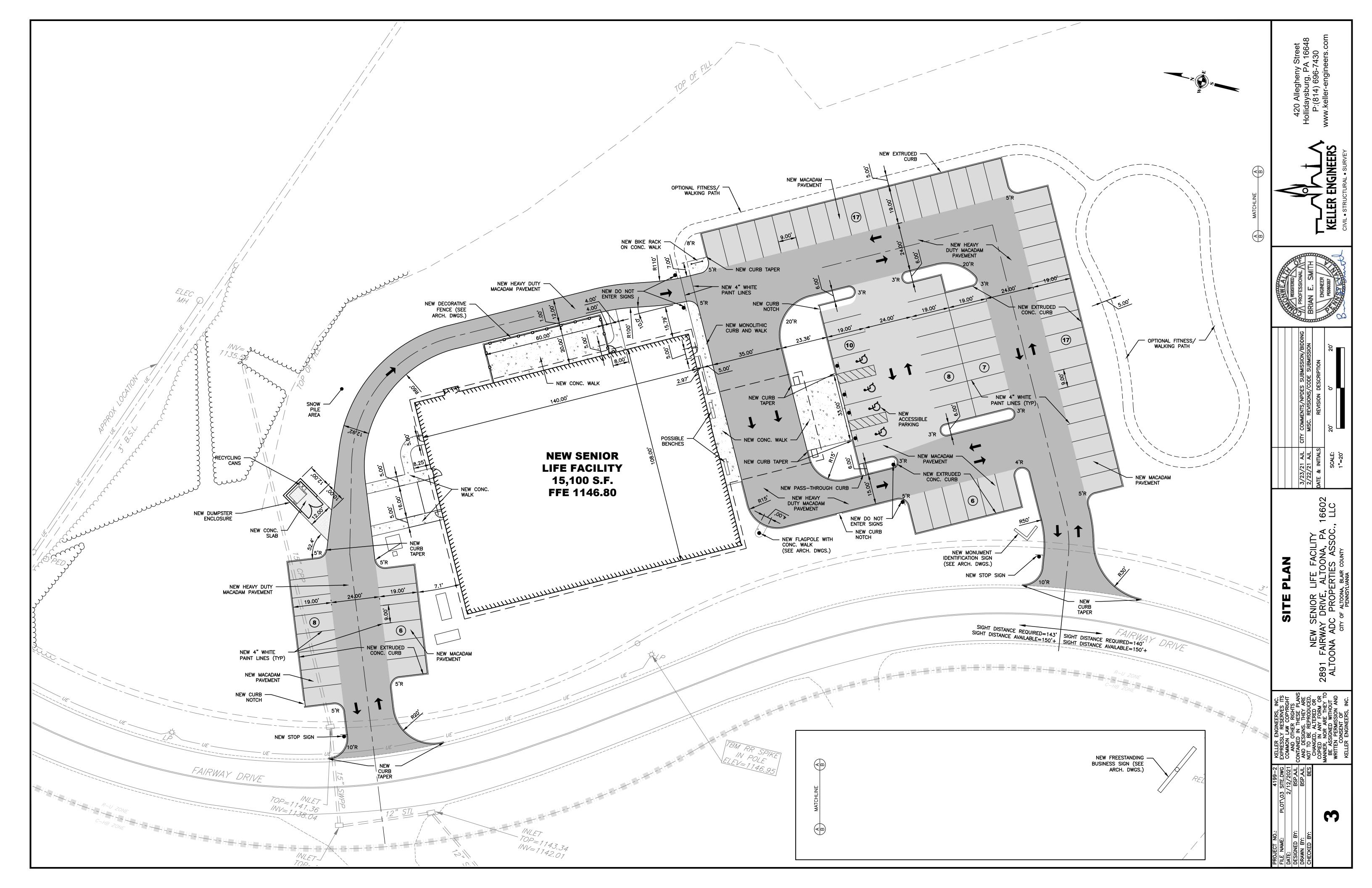
 TOTAL IMPERVIOUS 0.10 ACRES (0.04%) 1.18 ACRES (5.6%)

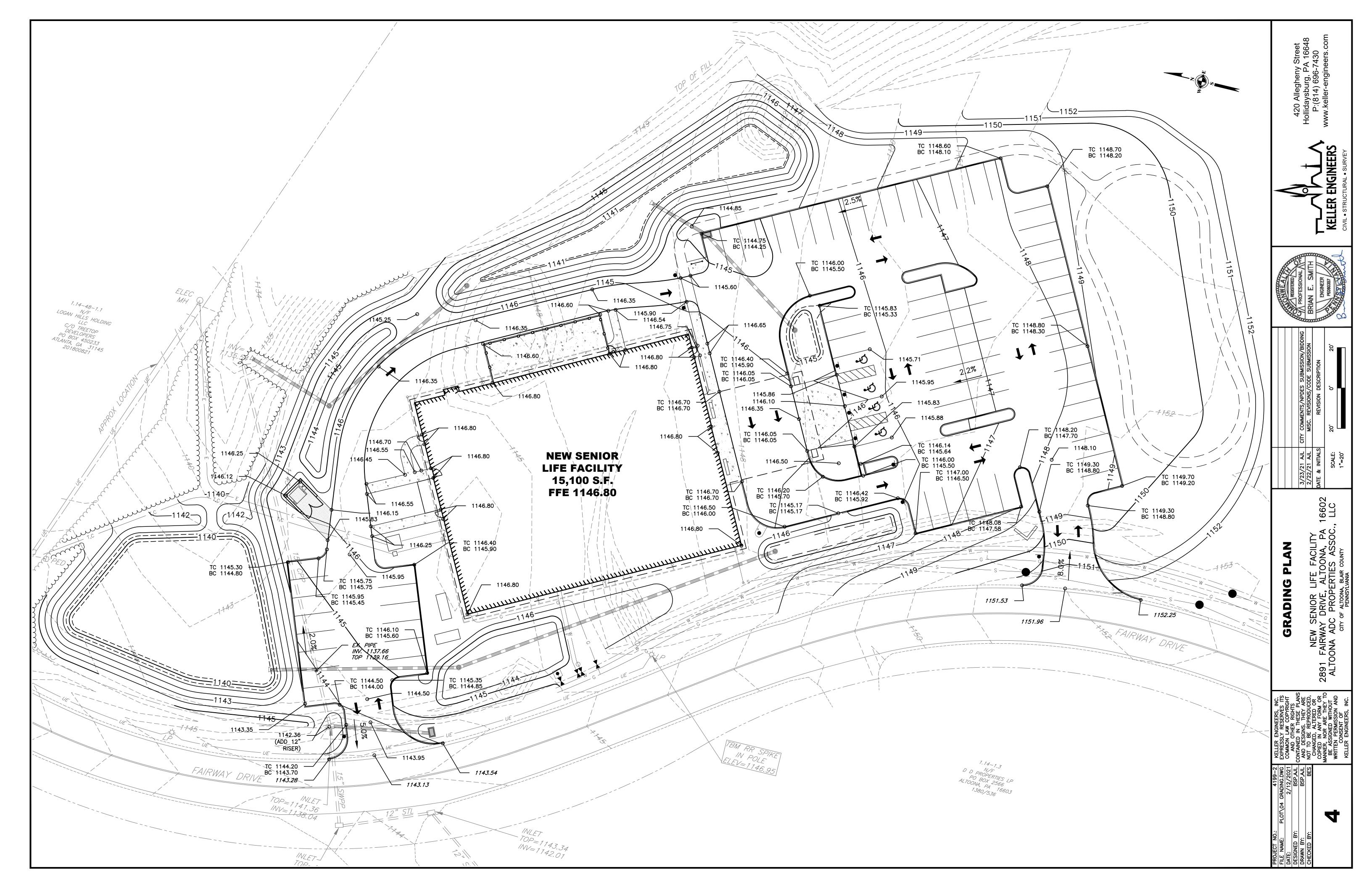
 TOTAL LOT SIZE: 21.41 AC.
- 14. ALL AREAS NOT COVERED BY IMPERVIOUS OR GRAVEL SURFACES SHALL BE CONSIDERED AS LAWN AREAS.
- 15. THERE ARE NO WETLANDS WITHIN THE LIMIT OF DISTURBANCE BASED ON FIELD OBSERVATION ON 12/4/2020.
- 16. SOILS ON THE SITE ARE EdB/D-EDOM SILTY CLAY LOAM (SOIL GROUP B)
- 17. WATER AND SEWERAGE SERVICE IS SUPPLIED BY, AND SHALL MEET THE REQUIREMENTS OF ALTOONA WATER AUTHORITY.
- 18. PROPOSED TELEPHONE, ELECTRIC, AND CABLE SERVICE TO BE CONSTRUCTED UNDERGROUND, CONTRACTOR TO COORDINATE EXACT LOCATION WITH RESPECTIVE UTILITY COMPANY.
- 19. ALL UTILITY TRENCHES TO BE RESTORED TO ORIGINAL OR BETTER CONDITIONS.
- 20. THE PROPOSED DEVELOPMENT IS OUTSIDE OF THE 100 YEAR FLOODPLAIN.
- 21. ALL STORMWATER FACILITIES SHALL BE INSPECTED AFTER EACH SIGNIFICANT STORM EVENT AND ON A MONTHLY BASIS. THEY SHALL BE CLEANED FROM ANY DEBRIS OR SEDIMENT DEPOSITS AND RESTORED TO ORIGINAL CONDITIONS.
- 22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK NECESSARY TO ESTABLISH LINES, LOCATION, GRADES, DIMENSIONS, AND ELEVATIONS OF THE WORK FROM EXISTING FACILITIES.
- 23. THE CONTRACTOR SHALL EXCAVATE TO THE LINES AND GRADES AS SHOWN ON THIS DRAWING. THE CONTRACTOR SHALL PERFORM ALL EXCAVATION OF EVERY DESCRIPTION AND OF WHATEVER SUBSTANCE ENCOUNTERED TO THE DEPTHS INDICATED. ALL

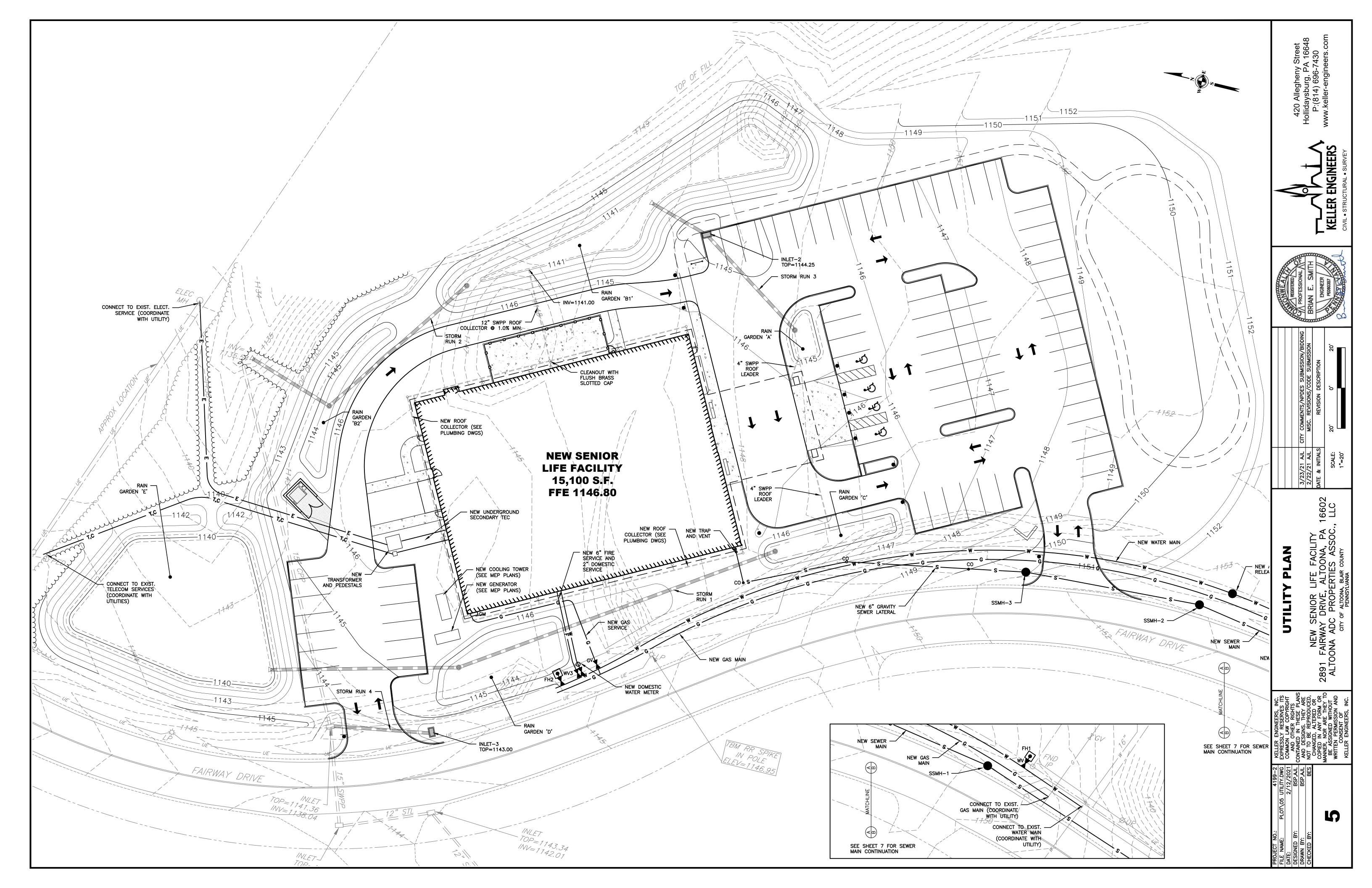
- EXCAVATED MATERIAL NOT REQUIRED OR UNSUITABLE FOR FILL SHALL BE REMOVED AND WASTED OFF-PROPERTY.
- 24. THE PRIMARY CONTRACTOR IS RESPONSIBLE FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE CONCERNING THE USE OF OR DISPOSAL OF CLEAN FILL FROM THIS PROJECT. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION 'S POLICY ENTITLED "MANAGEMENT OF FILL".
- 25. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE.) CLEAN FILL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE: FILL MATERIALS AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE STILL QUALIFIES AS CLEAN FILL PROVIDED THE TESTING REVEALS THAT THE FILL MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS AND FOLLOW THE GUIDANCE AS SET FORTH IN DEP POLICY "MANAGEMENT OF FILL".
- 26. UNLESS OTHERWISE INDICATED ON THIS DRAWING, REMOVE TREES, SHRUBS, GRASS, AND OTHER VEGETATION INTERFERING WITH INSTALLATION OF NEW CONSTRUCTION.
- 27. THE CONTRACTOR SHALL PROTECT IMPROVEMENTS ON ADJOINING PROPERTIES AND ON THE OWNER'S PROPERTY. IF DAMAGE OCCURS, DAMAGED AREAS SHALL BE RESTORED TO ORIGINAL CONDITION OR AS ACCEPTABLE TO PARTIES HAVING JURISDICTION.
- 28. ALL DISTURBED AREAS EXCEEDING THE LIMITS OF WORK TO BE RESTORED TO EXISTING CONDITIONS AT THE FULL EXPENSE OF THE CONTRACTOR UNLESS OTHERWISE DIRECTED BY THE OWNER.
- 29. ALL WORK PERFORMED SHALL BE IN ACCORDANCE WITH THESE SPECIFICATIONS AND THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 408, LATEST EDITION. HEREINAFTER REFERRED TO AS PADOT PUB. 408, AND ALL SUPPLEMENTS THERETO
- 30. THE CONTRACTOR SHALL PLACE SEEDING AND SOIL SUPPLEMENTS IN ALL DISTURBED AREAS, AND IN ACCORDANCE WITH SECTION 804 OF THE PADOT PUB. 408. REFER TO "EROSION AND SEDIMENT CONTROL" NOTES FOR SPECIFIC INSTRUCTIONS.
- 31. THE CONTRACTOR SHALL PLACE MULCHING IN ALL AREAS WHERE SEEDING IS REQUIRED BY THE CONTRACT DRAWING IN ACCORDANCE WITH SECTION 805 OF THE PADOT PUB. 408. PRECAUTIONS SHALL BE TAKEN TO STABILIZE THE MULCH UNTIL THE VEGETATIVE COVER IS ESTABLISHED. MULCH SEEDED AREAS IMMEDIATELY AFTER SEEDING. REFER TO "EROSION AND SEDIMENT CONTROL" NOTES FOR SPECIFIC INSTRUCTIONS
- 32. AN EFFORT HAS BEEN MADE TO LOCATE AND SHOW APPROXIMATE LOCATION OF EXISTING UTILITY LINES. ALL UTILITIES ARE NOT NECESSARILY SHOWN. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITIES TO VERIFY LOCATIONS PRIOR TO START OF CONSTRUCTION IN ACCORDANCE WITH PA ACT 38 OF 1991. CONTRACTOR MUST ALSO CONTACT THE PA ONE CALL SYSTEM AT LEAST 3 DAYS PRIOR TO START OF CONSTRUCTION BUT NOT MORE THAN 10 DAYS. PHONE NUMBER FOR PA ONE CALL IS 1-800-242-1776.
- 33. THE CONTRACTOR IS RESPONSIBLE TO KEEP CITY STREETS FREE OF MUD AND DEBRIS.
- 34. ALL ASPHALT JOINTS WITHIN THE CITY RIGHT-OF-WAY SHALL BE SAWCUT NEAT AND SEALED WITH AC-20.
- 35. A BUILDING PERMIT SHALL NOT BE ISSUED UNTIL SEWAGE PLANNING IS APPROVED.

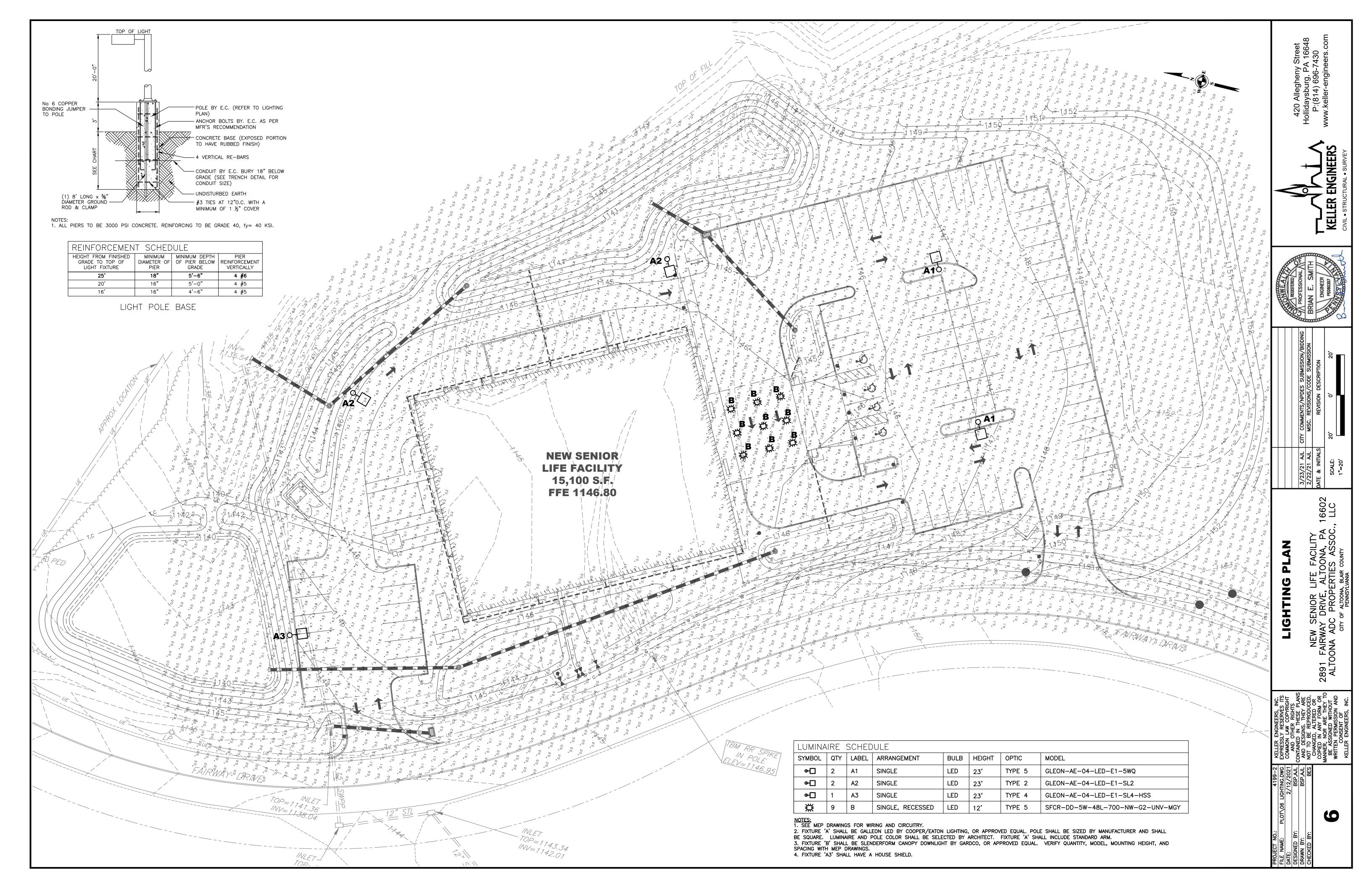


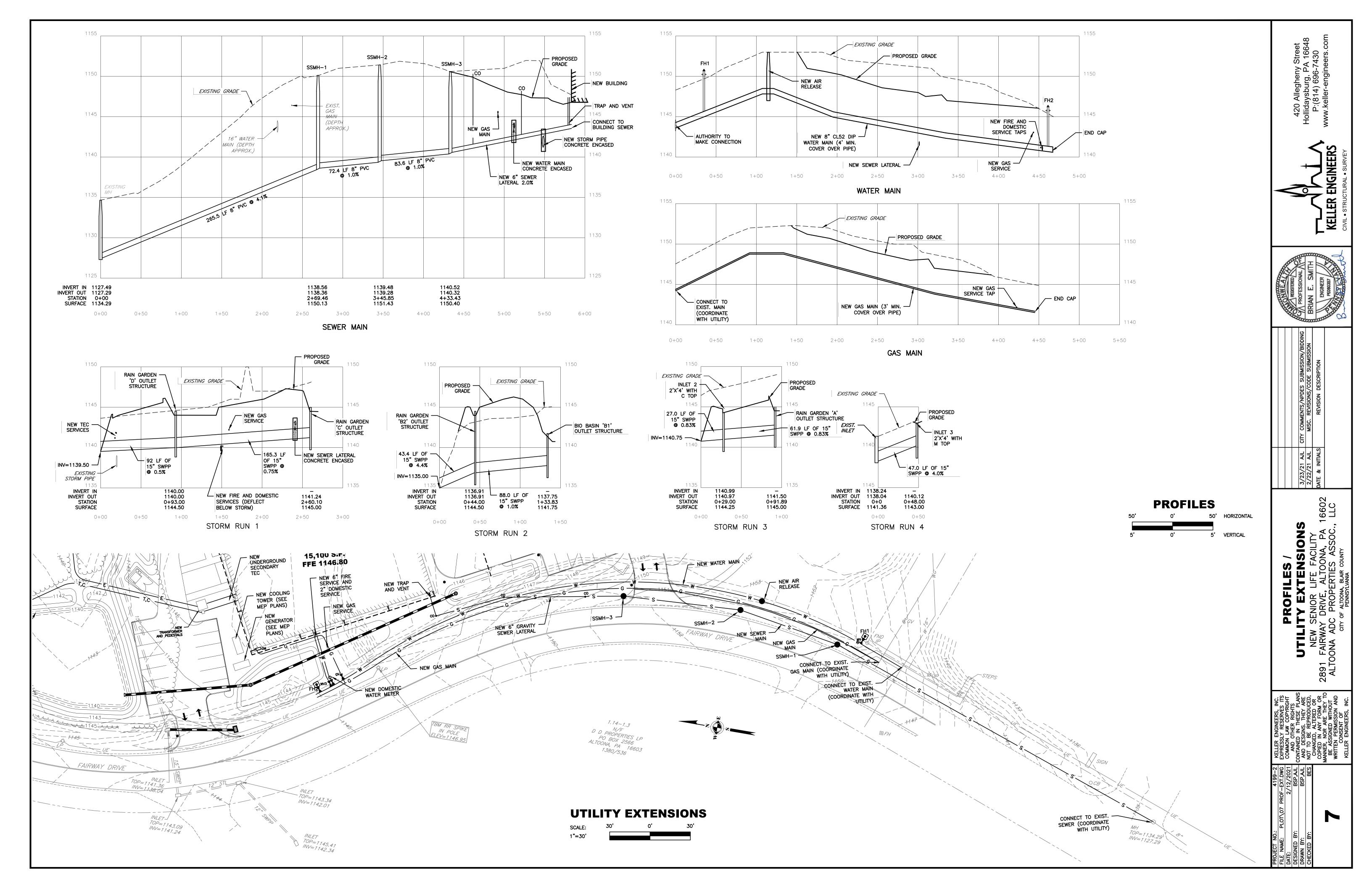


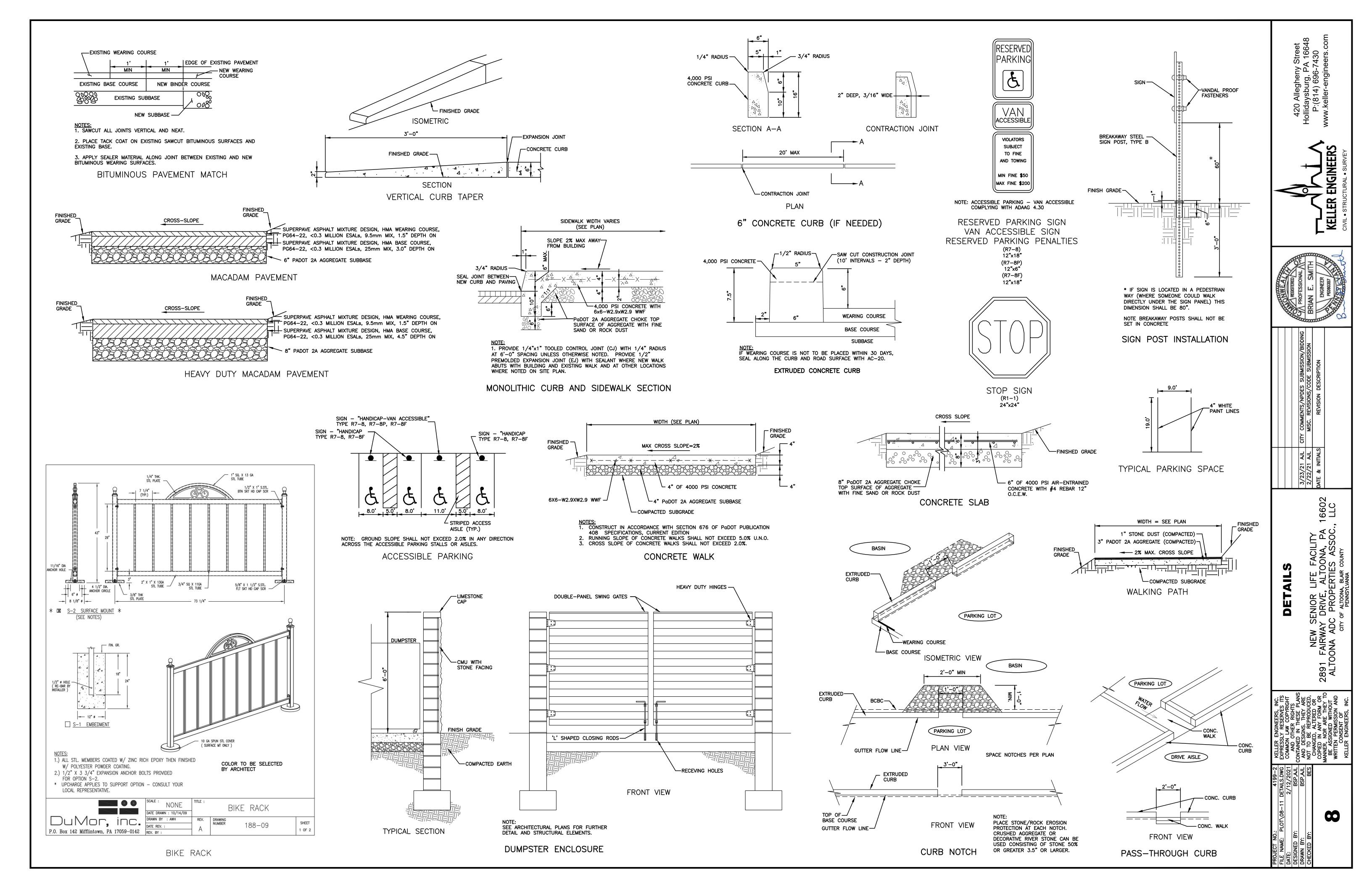


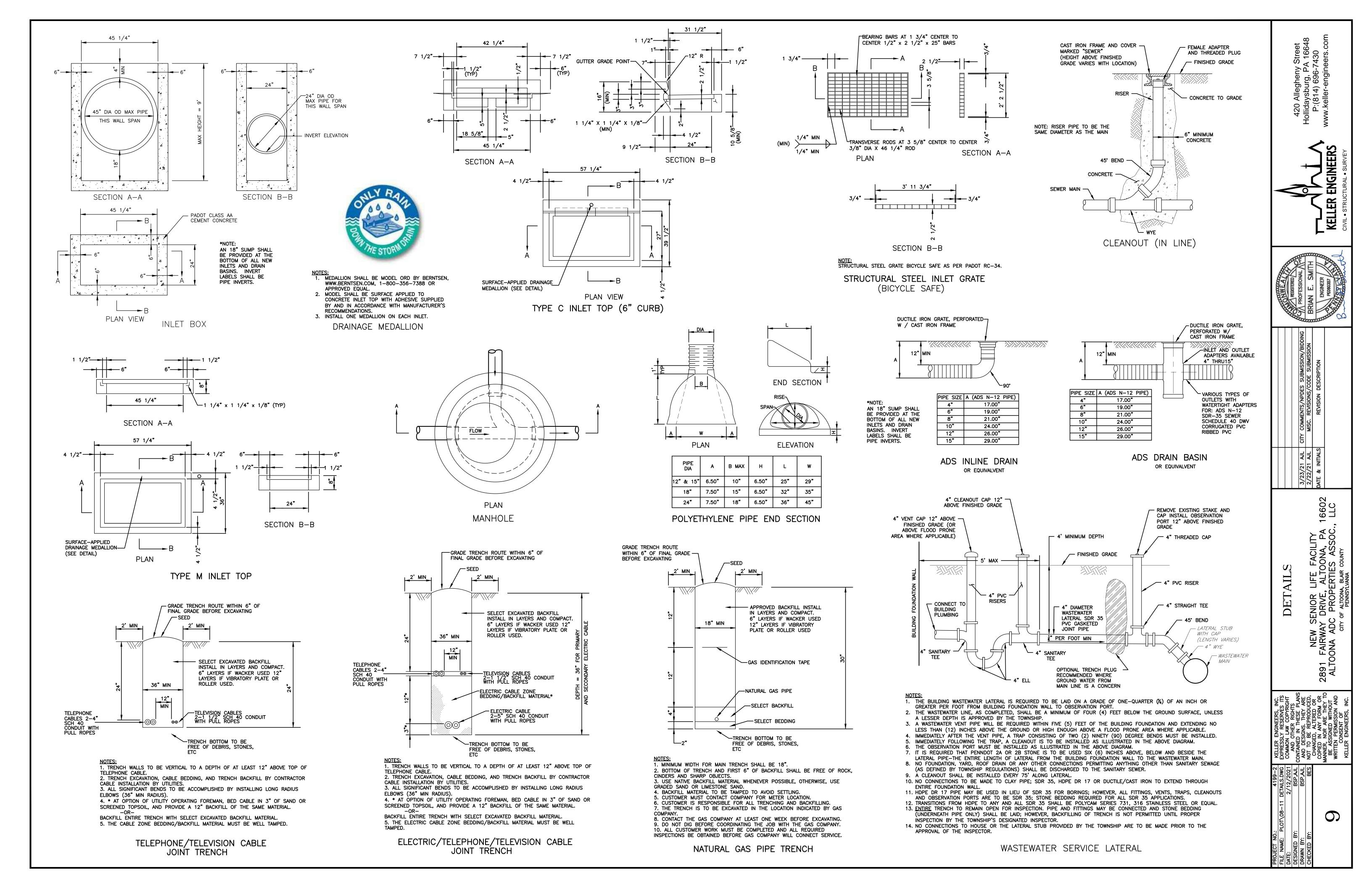


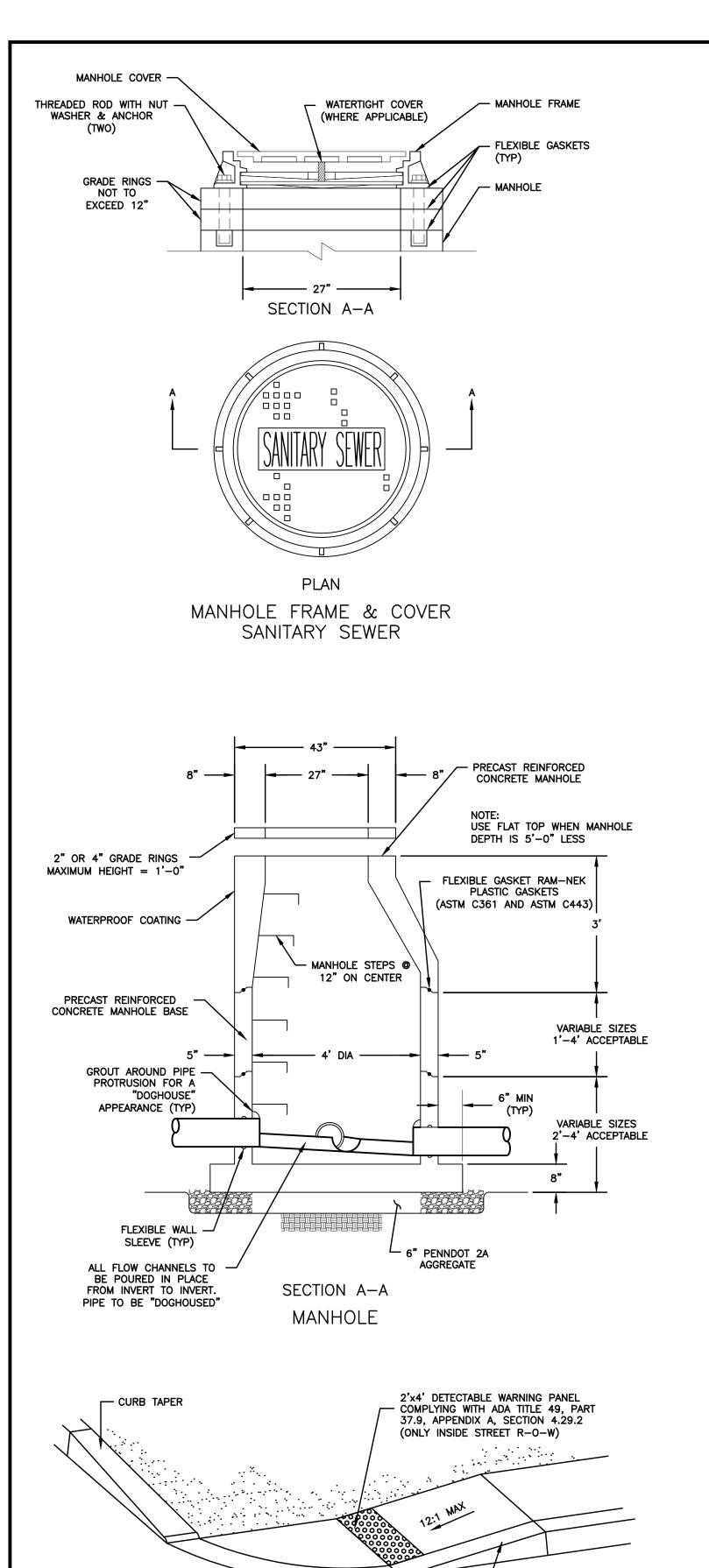












── MACADAM ──

SPECIFICATIONS, SECTIONS 630, 676, 420, 421 AND 422.

4. SEAL JOINTS WITH AN APPROVED SEALING MATERIAL.

NOTES:

1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUBLICATION 408

OR STRUCTURE WITH THE TOP OF JOINT FILLER FLUSH WITH ADJACENT CONCRETE SURFACE.

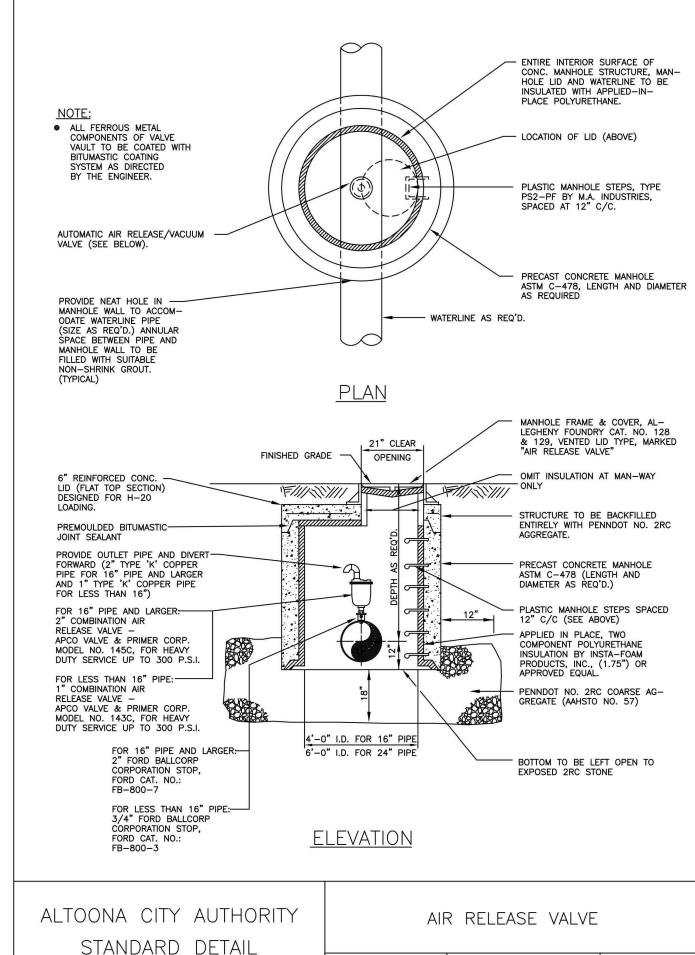
3. PROVIDE 1/2" EXPANSION JOINT MATERIAL WHERE CURB ADJOINS ANY RIGID PAVEMENT, SIDEWALK

HANDICAPPED ACCESSIBLE DROP CURB

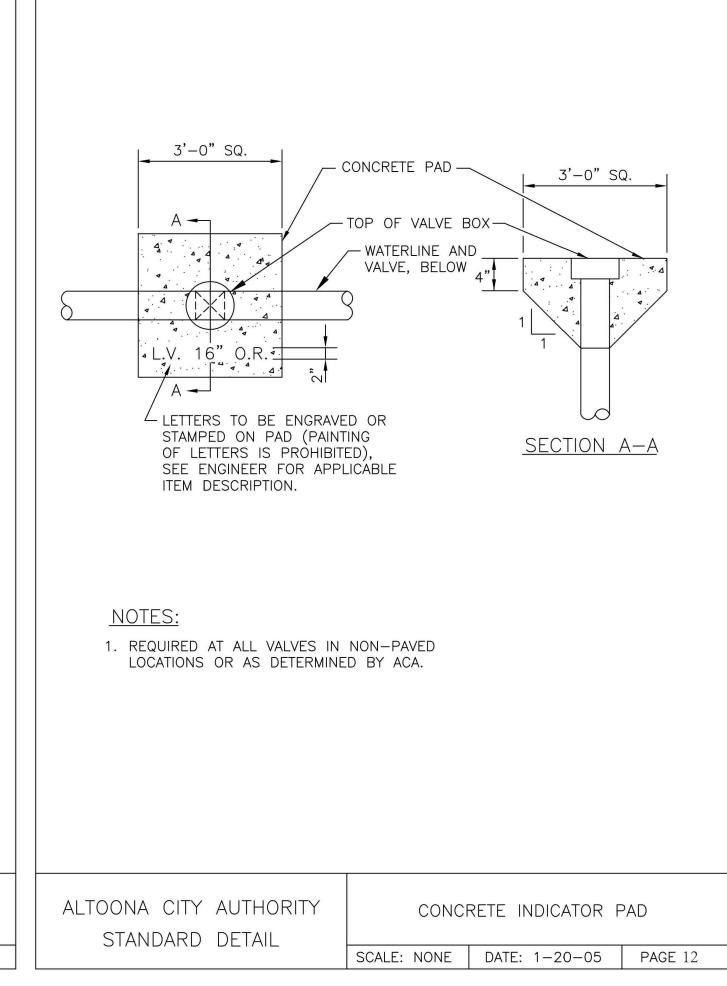
STYLE 'C' WITH DETECTABLE WARNINGS

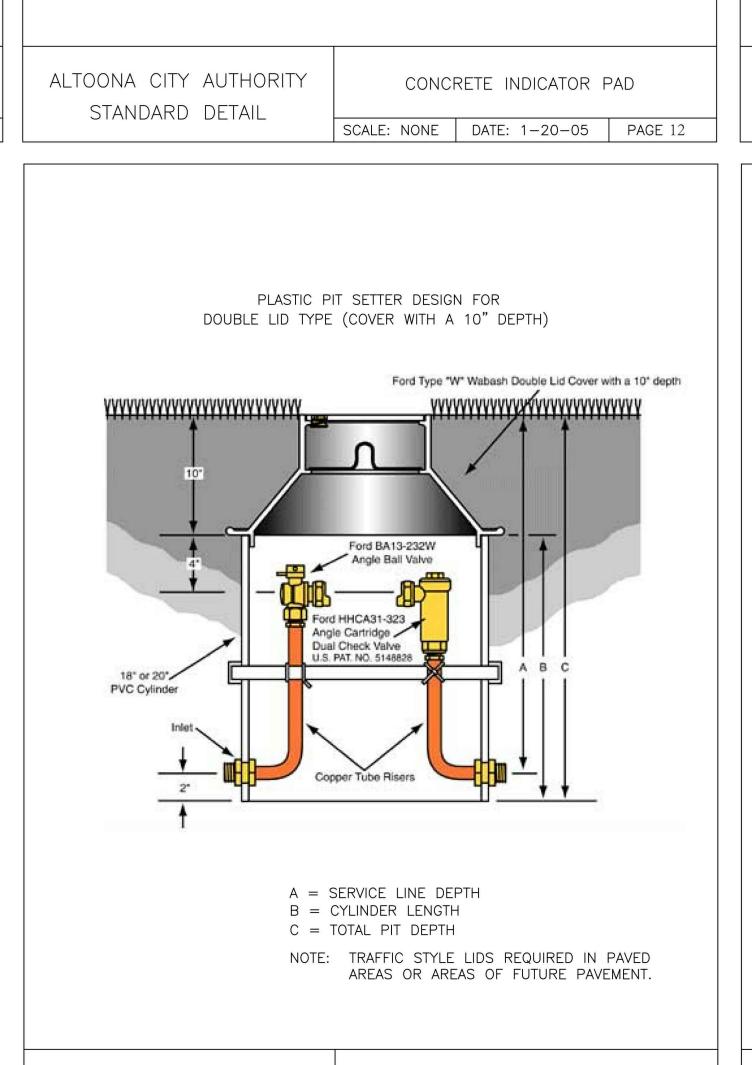
2. REFER TO PENNDOT STANDARD RC-67M SHEET 12 OF 13 FOR FURTHER DETAIL.

CONC. CURB



SCALE: NONE DATE: 1-20-05 PAGE 2





ALTOONA CITY AUTHORITY

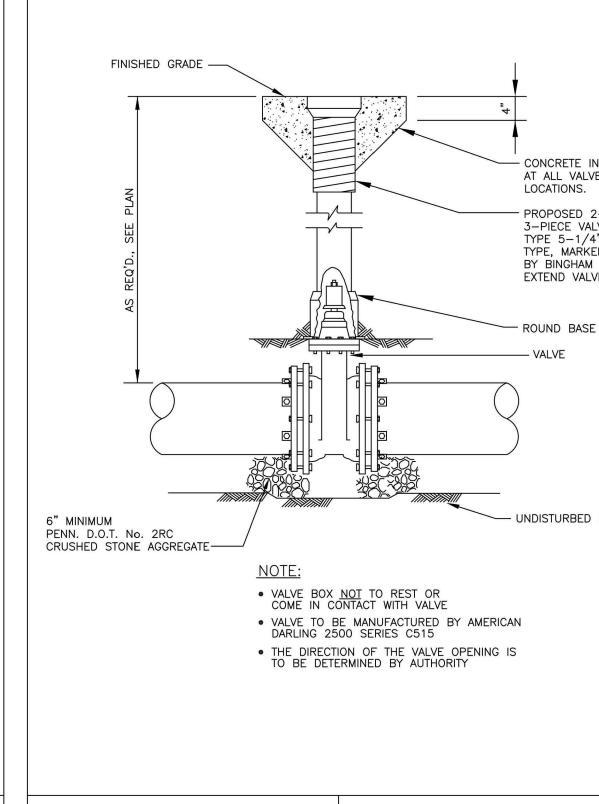
STANDARD DETAIL

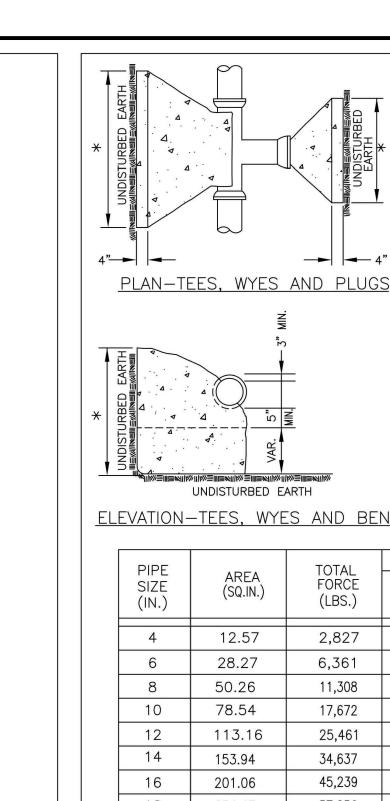
PLASTIC PIT SETTER

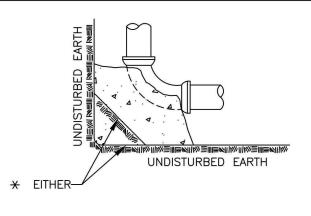
FOR COLD CLIMATES

PAGE 13

SCALE: NONE DATE: 1-20-05







420 Allegheny Street Hollidaysburg, PA 16648 P:(814) 696-7430 www.keller-engineers

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ENGINEERS

KELLER

PLAN-BENDS

NOTES:

• ALL TEES, WYES, CROSSES, PLUGS AND BENDS SHALL BE BLOCKED AGAINST FIRM GROUND WITH CONCRETE.

• EARTH PRESSURE FIGURED AT 4,000 PSF. AREA OF BLOCK MUST BE INCREASED PROPORTIONATELY IF EARTH ENCOUNTERED WILL NOT WITHSTAND THIS PRESSURE IN THE OPINION OF THE AUTHORITY.

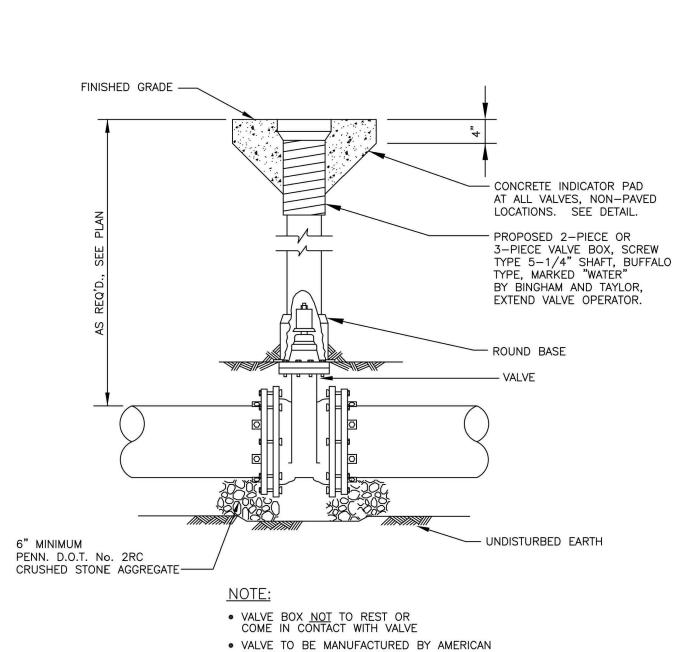
- TABLE IS BASED UPON 225 PSI OR 150 LBS. WORKING PRESSURE PLUS 50% WATER HAMMER.

* = FACE AREA NOT LESS THAN SHOWN IN TABLE BELOW.

ELEVATION-TEES, WYES AND BENDS

PIPE		TOTAL		AREA O	F BLOCK	IN SQ. FT	•
SIZE (IN.)	AREA (SQ.IN.)	FORCE (LBS.)	TEES & PLUGS	90° BENDS	45° BENDS	22-1/2° BENDS	11-1/4° BENDS
4	12.57	2,827	1.0	1.0	1.0	1.0	1.0
6	28.27	6,361	1.6	2.3	1.2	1.0	1.0
8	50.26	11,308	2.8	4.0	2.2	1.1	1.0
10	78.54	17,672	4.4	6.3	3.4	1.7	1.0
12	113.16	25,461	6.4	9.0	4.9	3.0	1.3
14	153.94	34,637	8.7	12.3	6.6	3.4	1.7
16	201.06	45,239	11.3	16.0	8.7	4.4	2.2
18	254.47	57,256	14.3	20.3	11.0	5.6	2.8
20	314.16	70,686	17.7	25.0	13.5	6.9	3.5
24	452.39	101,788	25.4	36.0	19.5	9.9	5.0

TOONA CITY AUTHORITY STANDARD DETAIL	CONCR	ETE THRUST BLOG	CKING
STAINDAILD DETAIL	SCALE: NONE	DATE: 1-20-05	PAGE 8



DET.

3/23/21 AJL 2/22/21 AJL DATE & INITIALS

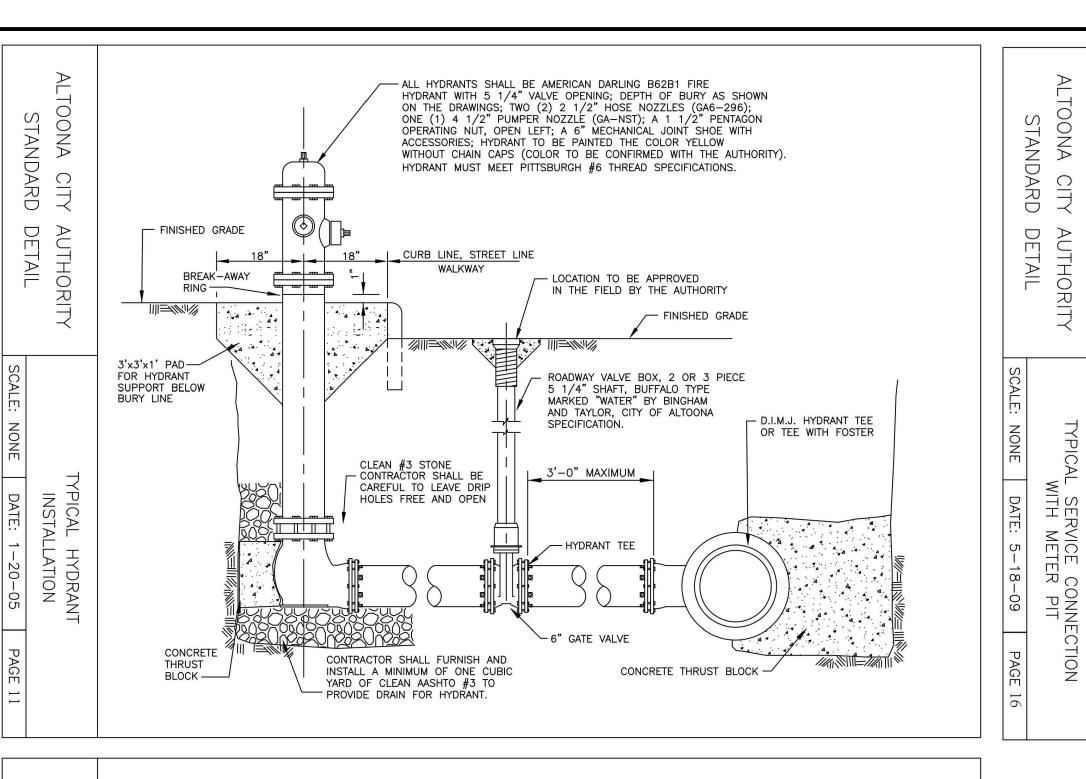
6602 LLC

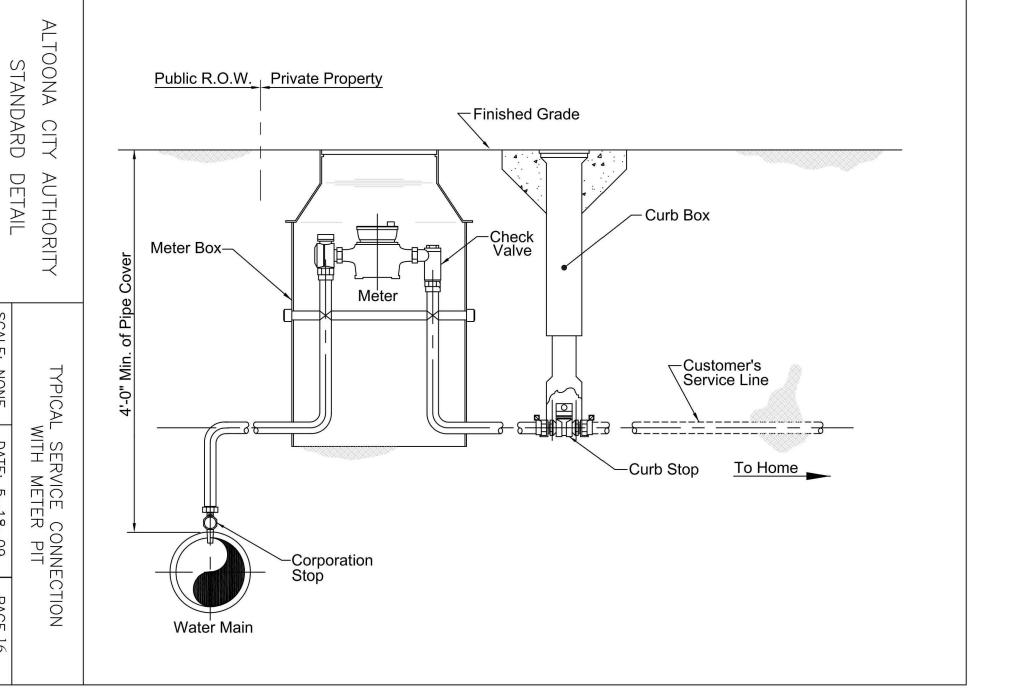
08-11 DETAIL

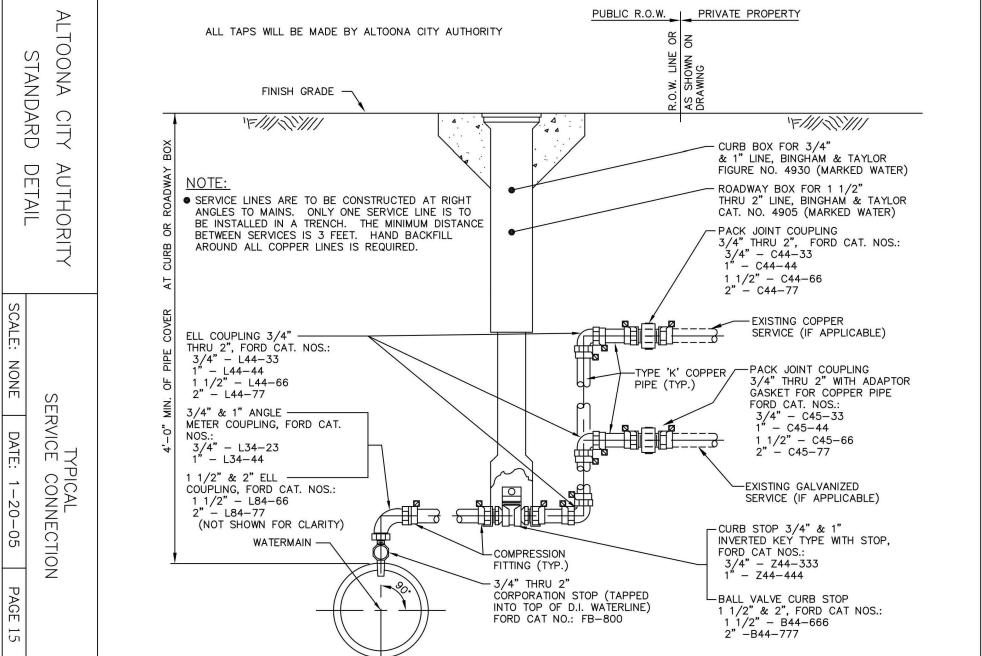
PAGE 14

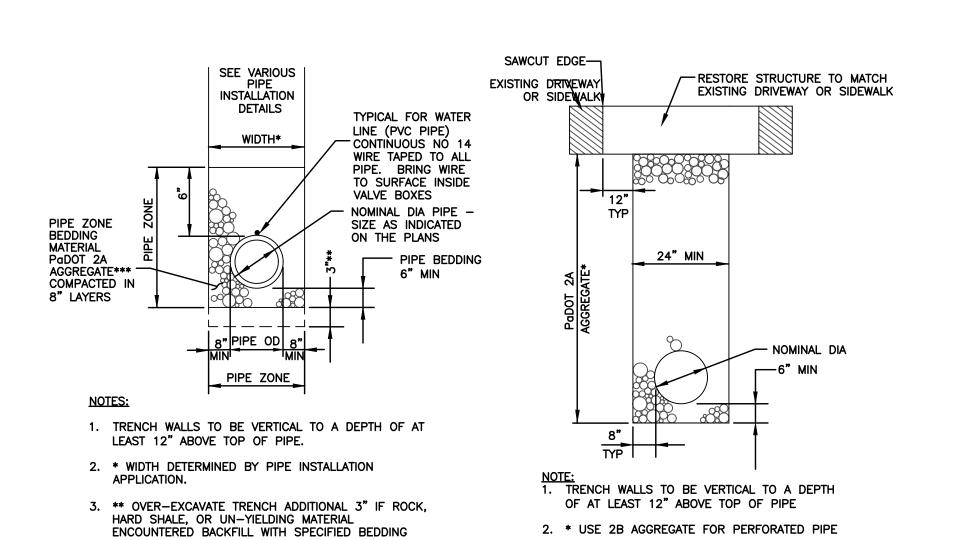
ALTOONA CITY AUTHORITY STANDARD DETAIL

4" TO 36" ROADWAY VALVE BOX SCALE: NONE DATE: 1-20-05









4. *** USE 2B FOR PERFORATED PIPE

PIPE BEDDING

2. * USE 2B AGGREGATE FOR PERFORATED PIPE

PIPE INSTALLATION

DRIVEWAY AND SIDEWALK

PATA 102 (Old PATA 7) - Notes

- 1. If the work space is completely within a parking lane and parking is present, the taper or shadow vehicle is not required.
- 2. For operations of 15 minutes or less:
- a. The Road Work (W20-1) sign is not required.
- b. All channelizing devices may be eliminated if a shadow vehicle is present.
- 3. For divided highways and one-way highways where it is physically possible, advance warning signs should also be placed on the left-hand side of the roadway.
- 4. When a shadow vehicle is not used, distance E is measured from end of taper to beginning of work space.



W20-1

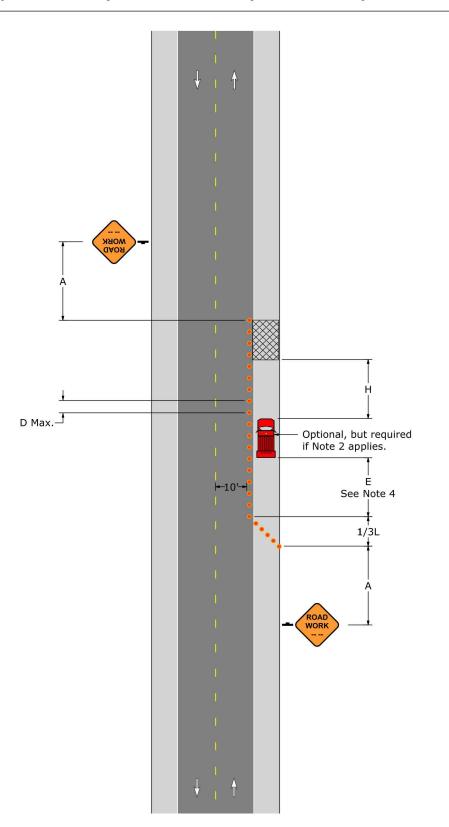
Sign Spacing Chart

Distance and Spacing Quick Reference Chart

										1						
		Dist	ance		Speed	l w		1/2L	1/3L			izing D		D	Е	Н
Condition	Α	В	C	F	Speed	VV		1/2L	1/3L	Per T	aper Ty	/pe (Le	ngth)			- 11
	Feet	Feet	Feet	Feet	MPH	Feet	Feet	Feet	Feet	L	1/2L	1/3L	50'	Feet	Feet	Fee
Urban						10	105	55	35							
35 MPH or less	100	100	100	100	25	11	115	60	40	6	6	6	6	50	155	150
33 MPH OF less						12	125	65	45							
Urban						10	150	75	50	6						
Greater than 35 MPH	350	350	350	350	30	11	165	85	55	7	6	6	6	60	200	150
Greater than 35 MPH						12	180	90	60	7						
						10	205	105	70	7						
Rural	500	500	500	500	35	11	225	115	75	8	6	6	6	70	250	150
						12	245	125	85	8]					
When multiple distance	e plac	ues a	re use	d		10	270	135	90	8						
on advance warning s	igns, t	hey s	hall all	be	40	11	295	150	100	9	6	6	6	80	305	150
of the same series typ	oe.					12	320	160	110	9	1			3,1000		
Example: either all "A		or X	XX FEE	T.		10	450	225	150	11	6					
•					45	11	495	250	165	12	7	6	6	90	360	150
Tonor Longth For		_				12	540	270	180	13	7					
Taper Length For	muia	S				10	500	250	170	11	6					
S	L				50	11	550	275	185	12	7	6	6	100	425	250
	14/6	c2				12	600	300	200	13	7					
40 MPH or less	$L = \frac{W_s^2}{6}$	5				10	550	275	185	11	6					
	0	0			55	11	605	305	205	12	7	6	6	110	495	250
45 MPH or more	I = W	15				12	660	330	220	13	7					

45 MPH or more L = WSNote: Channelizing devices used in taper shall be equally spaced at ½ D Max.

PATA 102 (Old PATA 7) **Work Space On Or Beyond The Shoulder (Minor Roadway Encroachment)**



TRAFFIC CONTROL

GINEERS





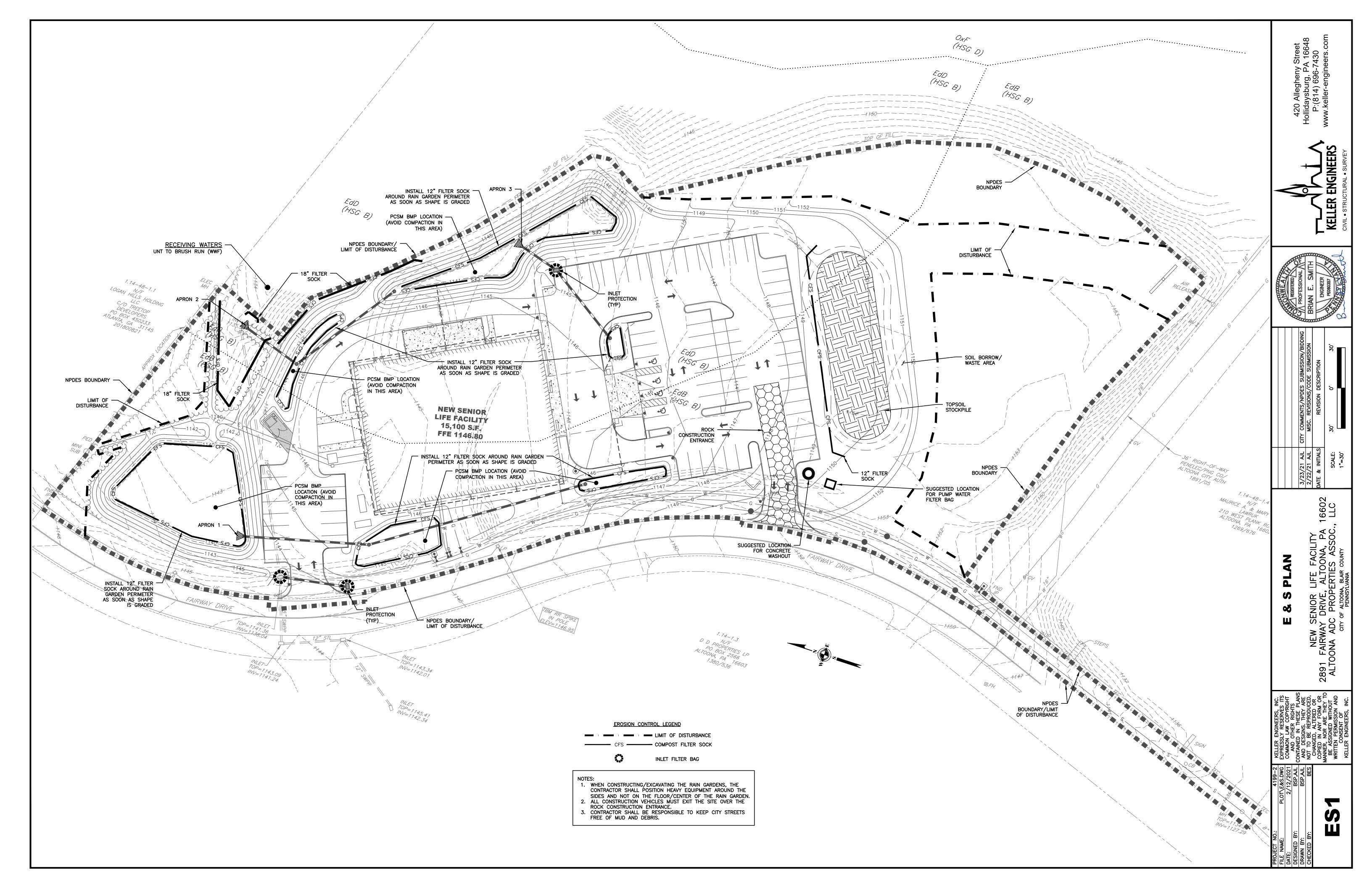
	3/23/21 AJL	3/23/21 AJL CITY COMMENTS/NPDES SUBMISSION/BIDDING
	2/22/21 AJL	MISC. REVISIONS/CODE SUBMISSION
_	DATE & INITIALS	REVISION DESCRIPTION

1660; LLC DET

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AND OTHER RIGHTS	CONTAINED IN THESE PLANS	AND DESIGNS. THEY ARE	NOT TO BE REPRODUCED,	CHANGED, ALTERED OR	COPIED IN ANY FORM OR	MANNER, NOR ARE THEY TO	BE ASSIGNED WITHOUT	WRITTEN PERMISSION AND	CONSENT OF	KELLER FNCINFERS INC

	COMMON LAW	AND OTHER	AND DESIGNS	NOT TO BE R	COPIED IN AN	MANNER, NOR	BE ASSIGNE	CONSEN
ביייליביייים ויייסין וייי	2/12/2021	BSP,AJL	BSP,AJL	BES				
2						7		7
2						7		4

S = Regulatory Speed Limit W = Width of Offset L = Length



GENERAL

1. STORMWATER FROM THIS PROJECT WILL FLOW TO UNT OF BRUSH RUN THAT HAS A DESIGNATED AND/OR EXISTING USE, ACCORDING TO PA DEP, OF WWF ACCORDING TO CHAPTER 93. 2. TOTAL SITE ACREAGE = 21.4 ACRES / TOTAL DISTURBANCE = 3.5 ACRES

3. THE EROSION AND SEDIMENT CONTROL PLAN NARRATIVE DATED MARCH 2021 IS TO BE CONSIDERED A PART OF THIS CONSTRUCTION SITE PLAN. 4. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES.

THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION. 5. CONSTRUCTION SHALL NOT COMMENCE UNTIL THE BLAIR COUNTY CONSERVATION DISTRICT HAS APPROVED THE EROSION AND SEDIMENT CONTROL PLAN

6. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE DEPARTMENT.

7. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN. 8. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE

DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS. 9. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PÉNNSYLVANIA CLEAN STREAMS LAW.

DUE DILIGENCE

1. THE PRIMARY CONTRACTOR IS RESPONSIBLE FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE CONCERNING THE USE OF OR DISPOSAL OF CLEAN FILL FROM THIS PROJECT. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION 'S POLICY ENTITLED "MANAGEMENT OF FILL".

2. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE.) CLEAN FILL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE: FILL MATERIALS AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE STILL QUALIFIES AS CLEAN FILL PROVIDED THE TESTING REVEALS THAT THE FILL MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS AND FOLLOW THE GUIDANCE AS SET FORTH IN DEP POLICY "MANAGEMENT OF FILL" 3. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.

EARTHWORK

1. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAPS(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.

2. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL. 3. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES OR IF CONDUCTED, AS RECOMMENDED IN GEOTECHNICAL INVESTIGATION OF PROJECT SITE.

4. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS OR, IF CONDUCTED, IN ACCORDANCE WITH GEOTECHNICAL INVESTIGATION OF PROJECT SITE. 5. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY

6. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED

7. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES. 8. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD. 9. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED. SHOULD UNANTICIPATED GEOLOGIC OR SOIL CONDITIONS BE ENCOUNTERED DURING EARTHMOVING THAT PRESENT A CONCERN ABOUT THE POTENTIAL FOR THE PRODUCTION OF POLLUTION, ALL EARTHMOVING ACTIVITIES SHALL CEASE UNTIL A QUALIFIED GEO—TECHNICAL PROFESSIONAL EVALUATES THE SITUATION. SHOULD SHALE BEDROCK BE EXPOSED DURING EXCAVATION THE FOLLOWING STEPS MUST BE TAKEN: NOTIFY THE GEOTECHNICAL ENGINEER-OF-RECORD (GER) IMMEDIATELY IF DECOMPOSED, WEATHERED AND/OR INTACT SHALE BEDROCK IS ENCOUNTERED. THE GER SHALL VISIT THE SITE WITHIN 24 HOURS TO DETERMINE IF ADDITIONAL LABORATORY TESTING (TOTAL SULFUR AND NEUTRALIZATION POTENTIAL) IS WARRANTED. ADDITIONAL COMMUNICATION BETWEEN THE SITE CIVIL ENGINEER, THE GER AND THE PADEP WILL BE REQUIRED TO REVIEW ANY LABORATORY RESULTS AND TO DETERMINE THE MOST APPROPRIATE REMEDIAL PROGRAM II

GRADING STANDARDS

WARRANTED.

VEGETATION ROOTS AND OTHER OBJECTIONABLE MATERIAL 2. AREAS WHICH ARE TO BE TOPSOILED SHOULD BE SCARIFIED TO A DEPTH OF 3 TO 5 INCHES, OR 6 TO 12 INCHES ON COMPACTED SOILS, PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHOULD HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHOULD HAVE A MINIMUM OF 2 INCHES OF TOPSOIL. 3. ALL EARTHEN FILLS SHOULD BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT. SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO UPPORT BUILDINGS, ROADWAYS, STRUCTURES AND CONDUITS, ETC. SHOULD BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR 4. ALL EARTHEN FILLS SHOULD BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.

1. AREAS TO BE FILLED SHOULD BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES,

5. FILL MATERIALS SHOULD BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY

6. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHOULD NOT BE INCORPORATED INTO FILLS.

7. FILL SHOULD NOT BE PLACED ON SATURATED OR FROZEN SURFACES. 8. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHOULD BE HANDLED IN ACCORDANCE WITH STANDARDS AND SPECIFICATIONS FOR SUBSURFACE DRAINS OR OTHER APPROVED METHOD. 9. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. STOCKPILES, BORROW AREAS AND SPOIL AREAS SHOULD BE SHOWN ON THE PLAN MAPS AND

SHOULD BE SUBJECT TO THE PROVISIONS OF THESE STANDARDS AS WELL AS THOSE OF THE APPROVED E&S PLAN. ALL APPROPRIATE PERMITS/AUTHORIZATION SHOULD BE OBTAINED PRIOR TO EARTH DISTURBANCE ACTIVITIES WITHIN THESE AREAS. WHEREVER POSSIBLE, FILLS SHOULD NOT BE CONSTRUCTED FROM OR BUILT UPON SOILS KNOWN TO HAVE LOW SHEAR STRENGTH OR THAT HAVE BEEN IDENTIFIED AS "LANDSLIDE PRONE" UNLESS IT CAN BE

SHOWN THAT IT CAN BE DONE WITH AN ACCEPTABLE SAFETY FACTOR. WHEREVER FILLS ARE TO BE CONSTRUCTED OUT OF OR ONTO SOILS IDENTIFIED AS HAVING LOW SHEAR STRENGTH OR ARE "LANDSLIDE PRONE," A REPORT SHOULD BE PREPARED BY A PROFESSIONAL GEOTECHNICAL ENGINEER OR PROFESSIONAL GEOLOGIST WHICH ADDRESSES THE FOLLOWING: a. THE CHARACTER OF THE BEDROCK AND ANY ADVERSE GEOLOGIC CONDITION IN THE AREA OF THE FILLS

INCLUDING PREVIOUS SLOPE FAILURES. b. A SURVEY OF ALL SPRINGS, SEEPS, AND GROUNDWATER FLOW OBSERVED OR ANTICIPATED DURING WET PERIODS IN THE AREAS OF THE FILLS.

THE MAXIMUM STEEPNESS OF SLOPE AND HEIGHT OF FILL TO BE CONSTRUCTED ON THE SITE. d. A STABILITY ANALYSIS INCLUDING, BUT NOT LIMITED TO, STRENGTH PARAMETERS, PORE PRESSURES, AND LONG-TERM SEEPAGE CONDITIONS. THESE DATA SHOULD BE ACCOMPANIED BY A DESCRIPTION OF ALL ENGINEERING DESIGN ASSUMPTIONS AND CALCULATIONS AS WELL AS THE ALTERNATIVES CONSIDERED IN

SELECTING THE DESIGN SPECIFICATIONS AND TESTING METHODS. e. THE ESTIMATED FACTOR OF SAFETY USED TO DESIGN THE SLOPES. AT A MINIMUM, THE LONG-TERM SAFETY FACTOR SHOULD BE 1.5 FOR CUTS OR FILLS WITHIN 50 FEET OF PUBLIC HIGHWAYS, RAILROADS, SURFACE WATERS, OR WHERE FAILURE COULD ENDANGER PUBLIC SAFETY. THE SAFETY FACTOR SHOULD BE A MINIMUM OF 1.25 FOR ALL OTHER FILLS.

BMP CONSTRUCTION AND MAINTENANCE

1. THE PRIME SITE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF BOTH TEMPORARY AND PERMANENT BMP'S FOR THE DURATION OF THE CONSTRUCTION EFFORT. THE PRIME SITE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR MAINTENANCE OF ALL BMP'S UNTIL STABILIZATION HAS OCCURRED. 2. UPON STABILIZATION, THE PRIME SITE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ALL TEMPORARY BMP'S. BEFORE ANY TEMPORARY EROSION CONTROL STRUCTURES ARE REMOVED, A VEGETATIVE

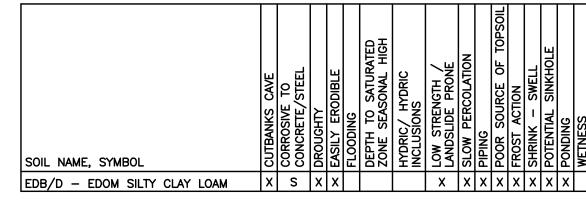
COVERAGE WITH A DENSITY OF 70% ACROSS THE DISTURBED AREAS MUST BE ACHIEVED.. AFTER PROJECT COMPLETION, THE OWNER WILL BE RESPONSIBLE FOR LONG-TERM MAINTENANCE OF ANY PERMANENT BMP'S. 3. UNTIL THE SITE IS STABILIZED. ALL EROSION AND SEDIMENT BMPS SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPS AFTER EACH MEASUREABLE STORM EVENT (0.25 INCHES OR MORE) AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK. INCLUDING CLEAN OUT. REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED. 4. A WRITTEN LOG SHOWING DATES THAT E&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF ANY INSPECTIONS. IT IS RECOMMENDED THAT DEP'S VISUAL INSPECTION REPORT FORM (3150-FM-BWEW0083) BE UTILIZED AS THE LOG TO TRACK AND DOCUMENT REQUIRED MAINTENANCE ACTIVITIES INCLUDING ANY CORRECTIONS AND/OR REPAIRS TO BMP'S. 5. BMP MAINTENANCE WILL BE PERFORMED IN ACCORDANCE WITH THE INDIVIDUAL DEVICE SCHEDULES AS SHOWN IN THE STANDARD CONSTRUCTION DETAILS. 6. THE PRIME SITE CONTRACTOR SHALL INSPECT BOTH TEMPORARY AND PERMANENT BMP'S ON THIS SCHEDULE UNTIL STABILIZATION IS ACHIEVED. AT THIS POINT, THE OWNER SHALL COMMENCE WEEKLY INSPECTIONS OF THE PERMANENT FACILITIES. 7. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, 8. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN 9, CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. IN NO

RECYCLING & DISPOSAL OF WASTE MATERIALS

1. THE PRIMARY SITE CONTRACTOR IS RESPONSIBLE FOR THE PROPER DISPOSAL OF WASTE FROM THIS PROJECT DURING CONSTRUCTION. CONSTRUCTION WASTES ARE THOSE THAT CAN ADVERSELY IMPACT WATER QUALITY AND INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH-WATER, AND SANITARY WASTES. THE CONTRACTOR WILL INSPECT THE PROJECT AREA WEEKLY AND PROPERLY DISPOSE OF ALL CONSTRUCTION WASTE. LITTERING BY CONSTRUCTION CREWS IS DISCOURAGED; HOUSEKEEPING OF THE SITE AND THE SURROUNDING AREA IS ENCOURAGED. WHENEVER POSSIBLE, REUSABLE WASTES WILL BE SEPARATED FROM OTHER WASTE AND HANDLED FOR RECYCLING. 2. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE. 3. CONCRETE WASHOUT A SUITABLE WASHOUT FACILITY MUST BE PROVIDED FOR THE CLEANING OF CONCRETE FROM CHUTES, MIXERS, AND HOPPERS OF THE DELIVERY VEHICLES. UNDER NO CIRCUMSTANCES MAY WASH WATER FROM THESE VEHICLES BE ALLOWED TO ENTER ANY SURFACE WATERS. PROPER SIGNAGE MUST BE PROVIDED SO DRIVERS ARE AWARE OF THE PRESENCE OF WASHOUT FACILITIES. A COMPOST FILTER SOCK WASHOUT AS SHOWN ON THE TYPICAL DETAIL DRAWING OR SUITABLE ALTERNATIVE APPROVED BY THE CONSERVATION DISTRICT OR DEPARTMENT MUST BE PROVIDED ON SITE. DO NOT PLACE WASHOUT FACILITIES WITHIN 50 FEET OF STORM DRAINS, OPEN DITCHES OR SURFACE WATERS, INCLUDING WETLANDS.

CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER SYSTEMS.

SOIL LIMITATIONS AND RESOLUTIONS



POOR SOURCE OF TOPSOIL, UNKNOWN SOIL CONDITIONS/DROUGHTY - APPLY ADEQUATE RATES OF LIME AND FERTILIZER FOR USE AS SOIL AMENDMENT. SOIL TESTING IS STRONGLY RECOMMENDED. IRRIGATION MAYBE NEEDED WHEN THIS SOIL IS USED FOR LANDSCAPED AREAS OR PCSM BMP'S

CORROSIVITY, LOW STRENGTH, LANDSLIDE POTENTIAL, WETNESS/DEPTH TO HIGH WATER TABLE, PIPING, FROST ACTION, SHRINK SWELL - CONDUCT GEO-TECHNICAL INVESTIGATION IF THESE SOILS WILL BE IMPACTED. SITE & STRUCTURAL BUILDING DESIGN WILL BE BASED ON RESULTS OF GEO-TECHNICAL INVESTIGATION.

SLOW PERCOLATION/POORLY DRAINED. WETNESS/DEPTH TO HIGH WATER TABLE - CONDUCT INFILTRATION TESTING IF THESE SOILS ARE IMPACTED BY PCSM BMP'S

EROSION HAZARD - MINIMIZE DISTURBED AREA; IMPLEMENT STABILIZATION BMP'S IMMEDIATELY. TEMPORARY STABILIZATION MUST BE IMPLEMENTED IMMEDIATELY IN AREAS WHERE ACTIVITY HAS CEASED FOR FOUR (4) OR MORE DAYS.

1. STOCKPILED TOPSOIL SHALL BE UTILIZED ON ALL SURFACE AREAS TO RECEIVE PERMANENT STABILIZATION AND SUPPLEMENTED IF NEEDED. 2. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES --6 TO 12 INCHES ON COMPACTED SOILS -- PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL 3. CUT OR FILL SLOPES WILL BE SEEDED AND MULCHED IN REGULAR VERTICAL INCREMENTS (15' MAX.) AS THE SLOPE IS BEING CONSTRUCTED. 4. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN. 5. WITHIN FOUR(4) DAYS AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS. 6. ALL FINAL SLOPES 3:1 OR STEEPER, WITHIN 50 FEET OF A SURFACE WATER, AND/OR ON ANY OTHER DISTURBED AREA SPECIFIED ON THE PLAN DRAWINGS WILL HAVE AN EROSION CONTROL BLANKET INSTALLED IN CONJUNCTION WITH THE PERMANENT VEGETATIVE BMP. NORTH AMERICAN GREEN S75 EROSION CONTROL BLANKET OR EQUIVALENT SHALL BE USED FOR THIS PURPOSE. 7. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS. 8. TEMPORARY STABILIZATION WILL BE UTILIZED AS NEEDED DURING PLANNED OR UNPLANNED PROJECT

SUSPENSION OR IF THE DISTURBED AREA ACHIEVES FINAL GRADE DURING AN UNFAVORABLE GROWING SEASON. DURING THE WINTER, TEMPORARY STABILIZATION CONSISTS OF MULCHING AT THE RATE OF 3 TONS/ACRE. ALL OTHER TIMES UTILIZE TEMPORARY SEED AND MULCH IN ACCORDANCE WITH THE DETAIL SHOWN IN THIS PLAN.

VEGETATIVE STABILIZATION TEMPORARY STABILIZATION - PENNDOT FORMULA E SEED MIX/SPECIES PLS** RATE OF APPLICATION LBS/AC

MULCH: STRAW (CLEAN OAT OR WHEAT) OR HAY AT THE RATE OF 3 TONS/ACRE (3 BALES PER 1000 SQUARE FEET) APPLIED WITH NON-ASPHALTIC EMULSION IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION

SOIL AMENDMENTS - STANDARD APPLICATION RATE FERTILIZER 10-20-20 APPLIED AT RATE OF 500LB/AC*

LIME 1 TON/ACRE* *SOIL TESTING SUGGESTED FOR PROPER RATE OF APPLICATION

**PLS = PERCENT LIVE SEED

RECOMMENDED DATE RANGE FOR APPLICATION: MARCH 15 TO OCT. 15 TEMPORARY STABILIZATION IMPLEMENTED OUTSIDE THIS DATE RANGE CAN BE MULCH (STRAW OR HAY) ALONE AT THE RATE SHOW ABOVE.

NURSE CROP: (PER PSU "EROSION CONTROL & CONSERVATION PLANTINGS ON NON-CROPLAND") ONE OF THE FOLLOWING NURSE CROPS MUST BE INCLUDED WITH ANY PERMANENT SEED MIXTURE: SEED MIX/SPECIES RATE OF APP, LBS/AC(W/90% + GERM) RATE OF APP. LBS/AC(W/< 90% GERM) WINTER WHEAT 720 WINTER RYE 84

PERMANENT STABILIZATION - PENNDOT FORMULA L STEEP SLOPES AND OTHER NON-MOWED SURFACES RATE OF APPLICATION (LB/1000 SY) SEED MIX/SPECIES HARD FESCUE MIX 16.8 CREEPING RED FESCUE ANNUAL RYEGRASS PULVERIZED AGRICULTURAL LIME 800 LB/1000 SY *FERTILIZER 10-20-20 APPLIED AT RATE OF 140 LB/1000 SY *FERTILIZER 38-0-0 APPLIED AT RATE OF 50 LB/1000 SY

MULCH: HAY AT THE RATE OF 3 TONS/ACRE (3 BALES PER 1000 SQUARE FEET) APPLIED WITH NON-ASPHALTIC EMULSION IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION RECOMMENDED DATE RANGE FOR APPLICATION: MARCH 15 TO JUNE 1 AND AUG. 1 TO OCT. 15 *SOIL TESTING SUGGESTED FOR PROPER RATE OF APPLICATION

PERMANENT STABILIZATION — PENNDOT FORMULA B LAWNS OR OTHER MOWED AND MAINTAINED SURFACES SEED MIX/SPECIES PLS** RATE OF APPLICATION LBS/AC PERENNIAL RYEGRASS

CREEPING RED OR CHEWING FESCUE 83.3% 78.4% 53 KENTUCKY BLUEGRASS MIX.

**PLS = PERCENT LIVE SEED

MULCH CLEAN OAT OR WHEAT STRAW AT THE RATE OF 3 TONS/ACRE (3 BALES PER 1000 SQUARE APPLIED WITH NON-ASPHALTIC EMULSION IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION SOIL AMENDMENTS — STANDARD APPLICATION RATE FERTILIZER 10-20-20 APPLIED AT RATE OF 1000 LB/AC*

LIME 6 TON/ACRE* RECOMMENDED DATE RANGE FOR APPLICATION: MARCH 15 TO JUNE 1 AND AUG. 1 TO OCT. 15 *SOIL TESTING SUGGESTED FOR PROPER RATE OF APPLICATION

BMP SEQUENCE OF INSTALLATION AND REMOVAL

1. THE CONTRACTOR SHALL INVITE A REPRESENTATIVE FROM THE BLAIR COUNTY CONSERVATION DISTRICT TO ATTEND THE PRECONSTRUCTION MEETING AND PROVIDE AT LEAST 7 DAYS NOTICE OF THE PRECONSTRUCTION MEETING TO ALL INVITED ATTENDEES. PERMITTEES, CO-PERMITTEES, OPERATORS, AND LICENSED PROFESSIONALS OR DESIGNEES RESPONSIBLE FOR THE EARTH DISTURBANCE ACTIVITY, INCLUDING IMPLEMENTATION OF E&S AND PCSM PLANS AND CRITICAL STAGES OF IMPLEMENTATION OF THE APPROVED PCSM PLAN, SHALL ATTEND A PRECONSTRUCTION MEETING

2. UPON INSTALLATION OR STABILIZATION OF ALL PERIMETER SEDIMENT CONTROL BMPS AND AT LEAST 3 DAYS PRIOR TO PROCEEDING WITH THE BULK EARTH DISTURBANCE ACTIVITIES. THE PERMITTEE OR CO-PERMITTEE SHALL PROVIDE NOTIFICATION TO THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT. 3. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776

FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES. 4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED BY THE BLAIR COUNTY CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION. EACH STEP OF THE SEQUENCE SHALL BE COMPLETED BEFORE PROCEEDING TO THE NEXT STEP, EXCEPT WHERE NOTED.

5. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE FOLLOWING CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING, AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&SC BMP'S SPECIFIED BY THE SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS

SITE SPECIFIC SEQUENCE

a)GRUBBING

1. FIELD-MARK LIMITS OF DISTURBANCE AND ENVIRONMENTALLY SENSITIVE AREAS INCLUDING STEEP SLOPES. 2. INSTALL ROCK CONSTRUCTION ENTRANCE AS SHOWN. INSTALL FILTER SOCK AT NORTHERN END OF SITE BEFORE DEMOLITION AND EARTHWORK BEGINS. 4. E&SC BMP'S SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY

STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT

OR THE DEPARTMENT.

1. CLEARING, GRUBBING, AND TOPSOIL STRIPPING CAN NOW BEGIN.

b)STOCKPILE TOPSOIL AS SHOWN ON PLANS c)EXCAVATIONS WITH INCREMENTAL STABILIZATION

d)FILLS WITH INCREMENTAL STABILIZATION

e)CONSTRUCTION OF BUILDINGS, ROADWAYS AND OTHER STRUCTURES f) SITE UTILITY CONSTRUCTION

a)INSTALL INLET PROTECTION AS INLETS ARE INSTALLED. h)INSTALL FILTER SOCK AROUND RAIN GARDENS WHEN THE SHAPE IS GRADED.

2. PERMANENT STABILIZATION a)REPLACEMENT OF TOPSOIL (4 - 6 INCHES). IMPORT TOPSOIL IF ADEQUATE TOPSOIL DOES NOT EXIST ON

b)PERMANENT SEEDING (1) ADD SOIL AMENDMENTS PER SOIL TEST RESULTS.

(2) APPLY SEED ACCORDING TO NOTES. (3) ADD STRAW MULCH AND/OR BLANKETING/

c)CRUSHED AGGREGATE SURFACES WILL BE APPLIED AS SOON AS ROAD OR PARKING LOT SURFACES HAVE BEEN GRADED.

d)COMPLETE PAVEMENT. e)COMPLETE LANDSCAPING AS SHOWN ON LANDSCAPE PLAN.

3. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE AN INSPECTION PRIOR TO CONVERTING E&SC BMP'S TO PCSM BMP'S OR TO SCHEDULE A FINAL INSPECTION IF THE PROJECT IS COMPLETE.

STAGE 3: REMOVAL/CONVERSION OF TEMPORARY SEDIMENT POLLUTION CONTROLS

1. TEMPORARY E&SC BMP'S (FILTER SOCK, ROCK CONSTRUCTION ENTRANCE, INLET PROTECTION) MUST BE REMOVED WHEN THE AREAS DRAINING TO THESE BMP'S HAVE ACHIEVED THE REQUIRED LEVEL OF STABILIZATION - DEFINED AS THE ESTABLISHMENT OF A UNIFORM 70% VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL SPECIES OR COVERED WITH AN ACCEPTABLE PERMANENT BMP; SUCH AS, GRAVEL OR PAVEMENT FOR DRIVEWAYS OR SIDEWALKS. STOCKPILED TOPSOIL SHALL BE UTILIZED ON ALL SURFACE AREAS TO RECEIVE PERMANENT STABILIZATION AND SUPPLEMENTED AS NEEDED. PERMANENT VEGETATIVE STABILIZATION SHALL BE DEFINED AS AN ESTABLISHED UNIFORM 70% PERENNIAL VEGETATIVE COVER.

2. AREAS DISTURBED DURING THE REMOVAL OF CONTROLS MUST BE STABILIZED IMMEDIATELY.

NOTE: CRITICAL STAGE REQUIRING OVERSIGHT BY LICENSED PROFESSIONAL

1. WHEN ALL SURFACES TRIBUTARY TO THE PCSM BMP'S, RAIN GARDEN/BIO-RETENTIONS AREAS, HAVE ACHIEVED PERMANENT VEGETATION, DEFINED AS THE ESTABLISHMENT OF A UNIFORM 70% VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL SPECIES OR COVERED WITH AN ACCEPTABLE PERMANENT BMP: SUCH AS. PAVEMENT FOR STREETS AND SIDEWALKS, THE RAIN GARDEN/BIO-RETENTIONS AREAS CAN BE CONSTRUCTED ACCORDING TO THE

CONSTRUCTION OF PCSM BMP

1. EXCAVATE BMP'S (BIO AREAS/RAIN GARDENS) TO THE DEPTH NEEDED TO ADD THE ROCK LAYER AND SOIL PLANTING MEDIUM TO THE REQUIRED FINAL DEPTH. SCARIFY THE BASIN FLOOR TO A MINIMUM DEPTH OF 6 INCHES AND AVOID COMPACTION OF THE BASIN FLOOR. 2. UNDER-DRAINS (IF SHOWN IN DESIGN) CAN NOW BE INSTALLED. BACKFILL BASIN WITH REQUIRED LEVEL OF

3. BACKFILL AREA WITH SOIL PLANTING MEDIUM. OVERFILLING OF SOIL IS RECOMMENDED TO ALLOW FOR SETTLEMENT. LIGHT HAND TAMPING IS ACCEPTABLE IF NECESSARY. 4. COMPLETE FINAL LEVELING TO ACHIEVE PROPOSED DESIGN ELEVATIONS LEAVING SPACE FOR UPPER COMPOST

5. VEGETATE BMP AS SHOWN ON THE PLANS. 6. OUTFALL DEVICES; SUCH AS, PIPES, RISERS, AND/OR LEVEL SPREADERS CAN NOW BE INSTALLED AND BECOME

7. STABILIZE ALL SURROUNDING DISTURBED SOIL SURFACES BY SEEDING AND MULCHING 8. ADDITIONAL SITE LANDSCAPE PLANTINGS CAN TAKE PLACE AT THIS TIME OR IN THE NEAR FUTURE.

TEMPORARY SEEDING WILL BE USED AS NEEDED. TEMPORARY SEED AND MULCH (IN ACCORDANCE WITH DETAIL) WILL BE APPLIED IN ALL AREAS WHERE ACTIVITIES CEASE FOR FOUR (4) DAYS OR IF ANY DISTURBED AREA ACHIEVES FINAL GRADE DURING AN UNFAVORABLE SEEDING SEASON.

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* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

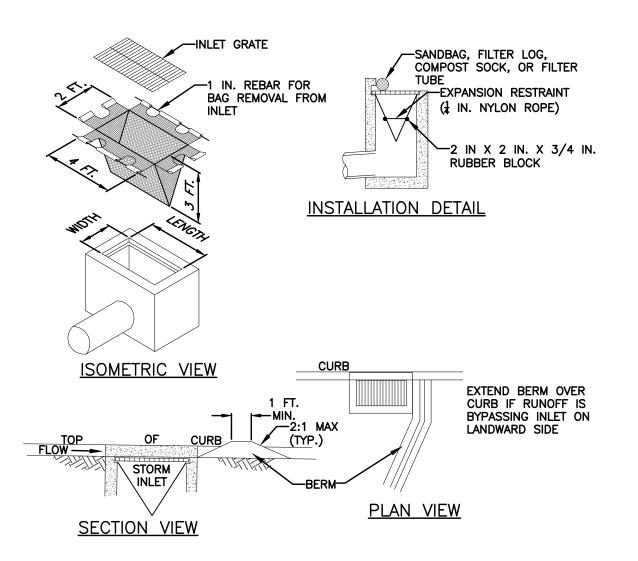
RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

STANDARD CONSTRUCTION DETAIL ROCK CONSTRUCTION ENTRANCE (ALTERNATE-ABACT)

NOT TO SCALE



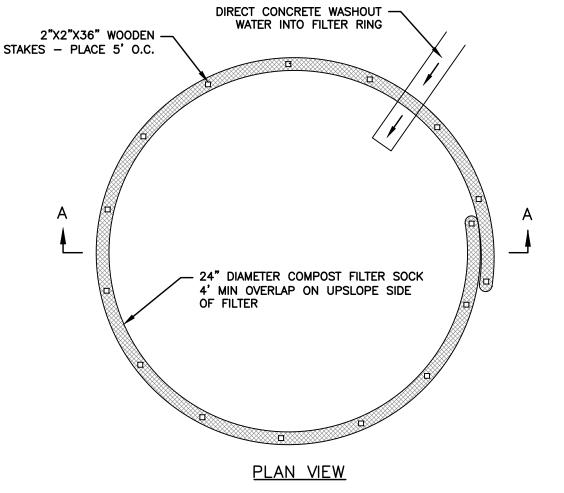
MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT. AT A MINIMUM. THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS. A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS. STANDARD CONSTRUCTION DETAIL #4-15 FILTER BAG INLET PROTECTION - TYPE C INLET NOT TO SCALE



24" DIAMETER COMPOST FILTER SOCK 4' MIN OVERLAP ON UPSLOPE SIDE ,2"X2"X36" WOODEN STAKES - PLACE 5' O.C. MAXIMUM DEPTH OF CONCRETE WASHOUT WATER IS 50% OF FILTER RING HEIGHT PLASTIC SHEETING, 10 MIL. THICKNESS (MIN)

 1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE. • 2. 18" DIAMETER FILTER SOCK MAY BE STACKED ONTO DOUBLE

• 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT. IMPERVIOUS PLASTIC SHEETING SHOULD BE PLACED AT THE LOCATION OF THE WASHOUT.

SECTION A-A

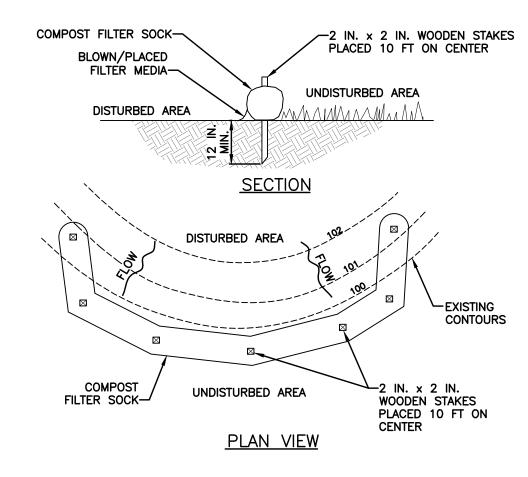
 STAKE COMPOST SOCKS AS RECOMMENDED BY THE MANUFACTURER AROUND PERIMETER OF THE PLASTIC SHEETING SO AS TO FORM A RING WITH THE ENDS OF THE SOCK LOCATED AT THE UPSLOPE CORNER. ENSURE CONTINUOUS CONTACT OF THE SOCK WITH THE PLASTIC SHEETING AT ALL LOCATIONS.

WHERE NECESSARY, SOCKS MAY BE STACKED AND STAKED SO AS TO FORM A TRIANGULAR

PLACE AT A CONVENIENT LOCATION FOR ACCESS BY THE CONCRETE TRUCKS, PREFERABLY NEAR THE PLACE WHERE THE CONCRETE IS BEING POURED, BUT FAR ENOUGH FROM OTHER VEHICULAR TRAFFIC TO MINIMIZE THE POTENTIAL FOR ACCIDENTAL DAMAGE OR SPILLS. WHEREVER POSSIBLE, THEY SHOULD BE LOCATED ON SLOPES NOT EXCEEDING A 2% GRADE.

THE WASHOUT MUST CLEANED OF ACCUMULATED MATERIAL WHEN FACILITY IS 75% FULL. MATERIAL CLEANED OUT OF DEVICE MUST BE PROPERLY DISPOSED. MATERIAL SUITABLE TO MIX WITH TOPSOIL CAN BE DEPOSITED IN/ON THE SITE'S TOPSOIL STOCKPILES WHICH ARE PROTECTED WITH DOWNSLOPE PERIMETER SEDIMENT BARRIERS. WHEN WASHOUT IS NO LONGER NEEDED THE PLASTIC SHEETING AND USED FILTER SOCK MUST BE TAKEN TO A LANDFILL FOR PROPER DISPOSAL.

> CONCRETE WASHOUT NOT TO SCALE



SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.

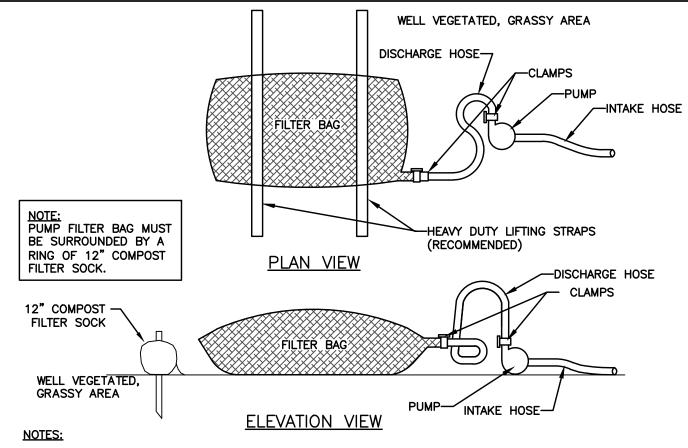
TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.

BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

> STANDARD CONSTRUCTION DETAIL #4-1 COMPOST FILTER SOCK NOT TO SCALE



LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.

BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.

COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS.

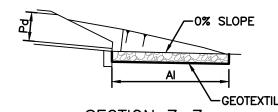
AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.

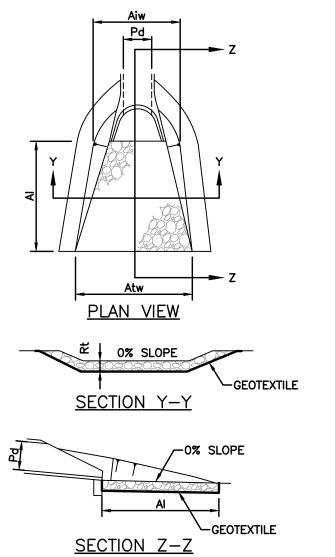
FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY

STANDARD CONSTRUCTION DETAIL #3-16 PUMPED WATER FILTER BAG NOT TO SCALE



DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

STANDARD CONSTRUCTION DETAIL #9-1 RIPRAP APRON AT PIPE OUTLET WITH FLARED END SECTION OR ENDWALL



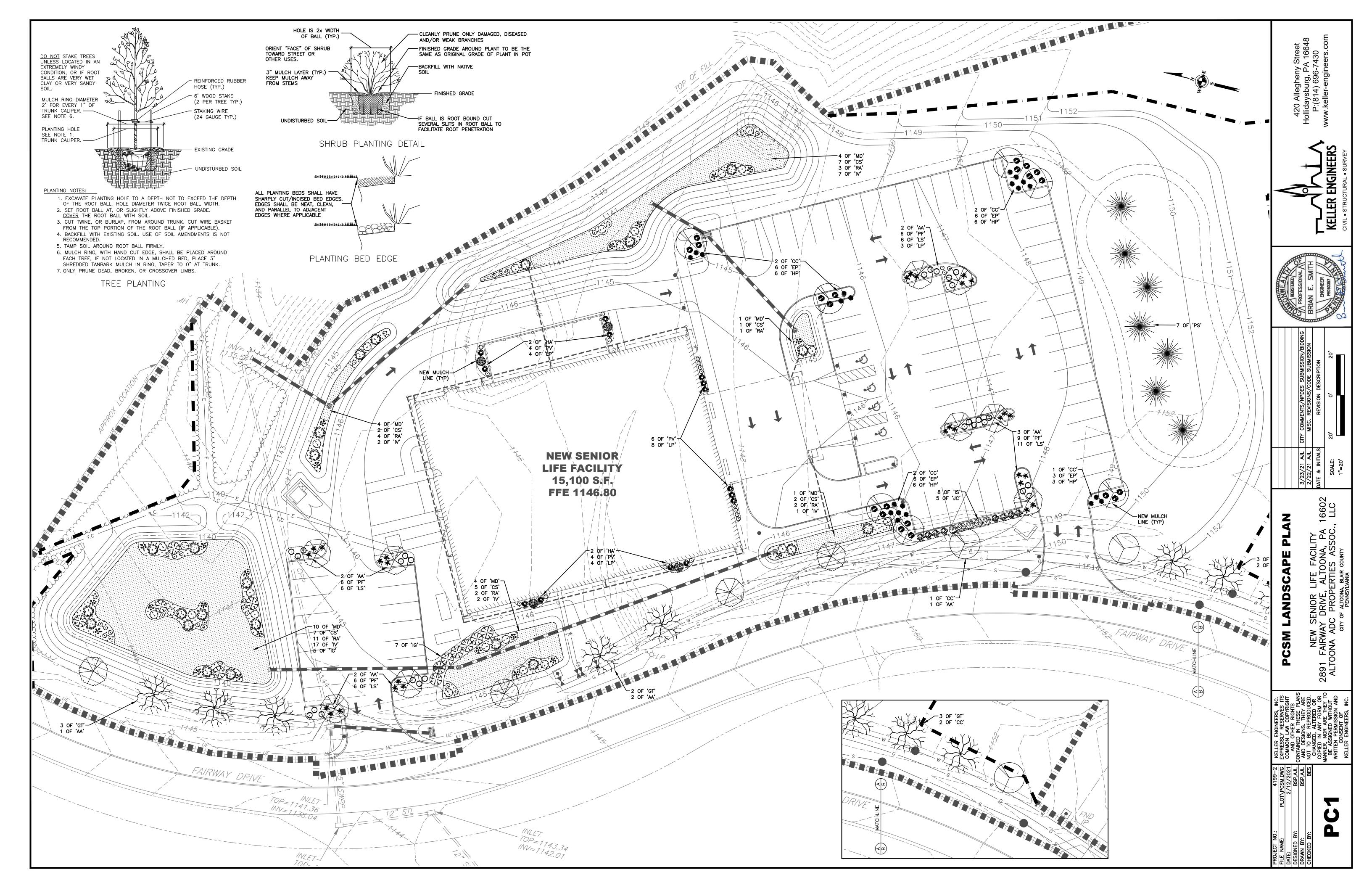
SIZE WIDTH Aiw (FT) Atw (FT)

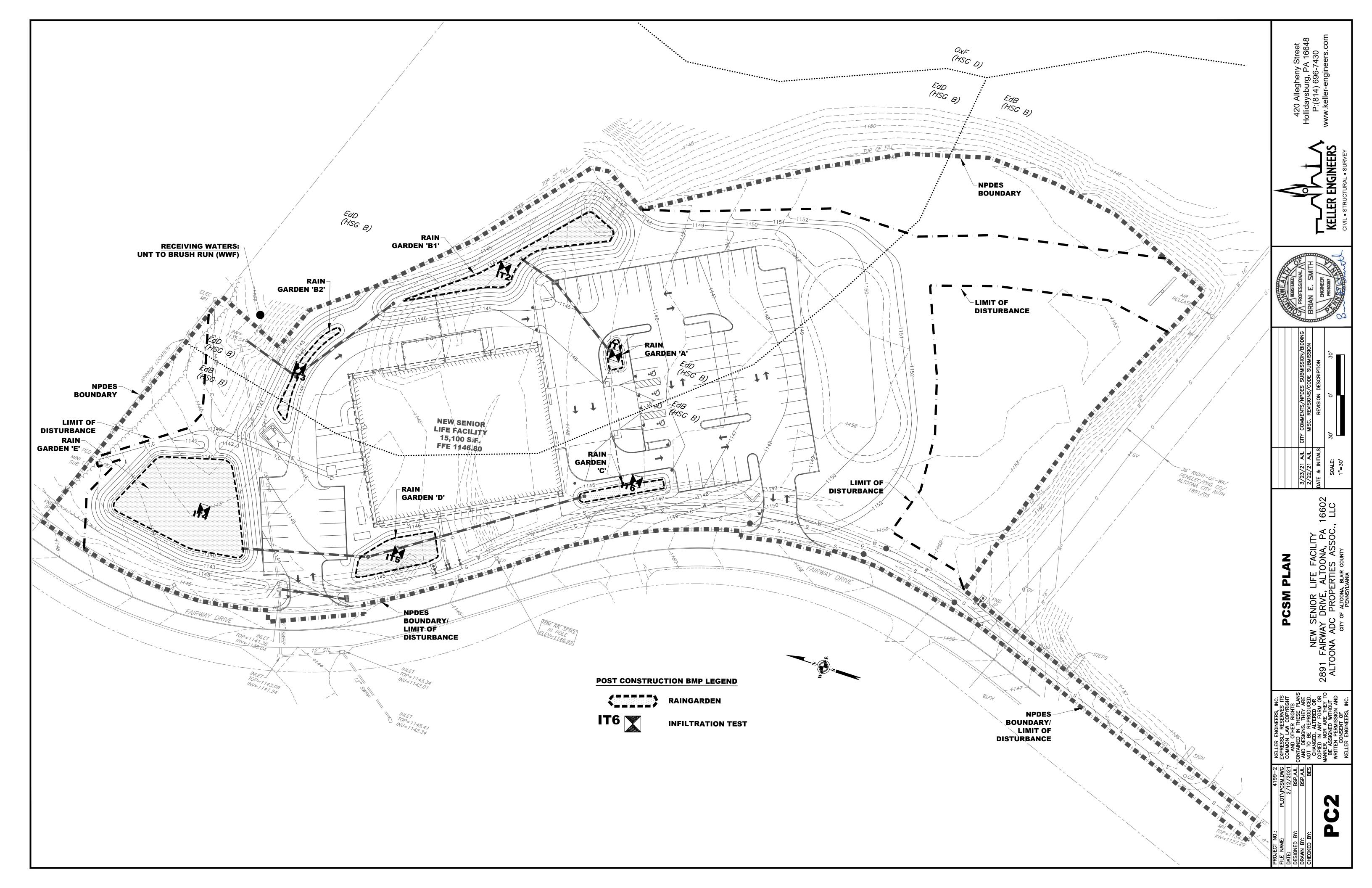
ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS. ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT.

NOT TO SCALE

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PROJECT DESCRIPTION/SITE CHARACTERISTICS

LAND USE PAST: WOODLAND PRESENT: COMPLETED AND STABILIZED CLEAN FILL DISPOSAL SITE PROPOSED: HEALTH SERVICES RECEIVING WATERS: UNT TO BRUSH RUN (WWF)

CONSTRUCTION NOTES

- ANY PROPOSED INFILTRATION BMP'S WILL BE PROTECTED FROM COMPACTION UNTIL SITE STABILIZATION IS ACHIEVED AS SHOWN ON THE CONSTRUCTION DRAWINGS.
- 1. WHEN ALL SURFACES TRIBUTARY TO THE PCSM BMP'S, RAIN GARDEN/BIO-RETENTIONS AREAS, HAVE ACHIEVED PERMANENT VEGETATION, DEFINED AS THE ESTABLISHMENT OF A UNIFORM 70% VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL SPECIES OR COVERED WITH AN ACCEPTABLE PERMANENT BMP; SUCH AS, PAVEMENT FOR STREETS AND SIDEWALKS, THE RAIN GARDEN/BIO-RETENTIONS AREAS CAN BE CONSTRUCTED ACCORDING TO THE
- 2.EXCAVATE BMP'S (BIO AREAS/RAIN GARDENS) TO THE DEPTH NEEDED TO ADD THE ROCK LAYER AND SOIL PLANTING MEDIUM TO THE REQUIRED FINAL DEPTH. SCARIFY THE BASIN FLOOR TO A MINIMUM DEPTH OF 6 INCHES AND AVOID COMPACTION OF THE BASIN FLOOR.
- 3.UNDER—DRAINS (IF SHOWN IN DESIGN) CAN NOW BE INSTALLED. BACKFILL BASIN WITH REQUIRED LEVEL OF STONE 4.BACKFILL AREA WITH SOIL PLANTING MEDIUM. OVERFILLING OF SOIL IS RECOMMENDED TO ALLOW FOR SETTLEMENT. LIGHT HAND TAMPING IS ACCEPTABLE IF NECESSARY
- 5.COMPLETE FINAL LEVELING TO ACHIEVE PROPOSED DESIGN ELEVATIONS LEAVING SPACE FOR UPPER COMPOST LAYER. 6. VEGETATE BMP AS SHOWN ON THE PLANS.
- 7. OUTFALL DEVICES: SUCH AS. PIPES, RISERS, AND/OR LEVEL SPREADERS CAN NOW BE INSTALLED AND BECOME OPERATIONAL. 8. STABILIZE ALL SURROUNDING DISTURBED SOIL SURFACES BY SEEDING AND MULCHING 9. ADDITIONAL SITE LANDSCAPE PLANTINGS CAN TAKE PLACE AT THIS TIME OR IN THE NEAR FUTURE.

- UPON COMPLETION OF CONSTRUCTION THE OWNER IS RESPONSIBLE TO ASSURE WASTES THAT RESULT FROM NORMAL MAINTENANCE OF THE PCSM BMP'S ARE PROPERLY DISPOSED. LITTER AND TRASH THAT COULD ACCUMULATE IN DRAINAGE FACILITIES MUST BE REMOVED DURING MAINTENANCE AND PROPERLY DISPOSED ACCORDING TO DEP REGULATORY REQUIREMENTS, SEE BELOW. DEAD OR DYING VEGETATION OR GRASS CLIPPINGS MUST BE DISPOSED AT AN APPROVED YARD WASTE RECYCLING FACILITY. ACCUMULATED SEDIMENT THAT IS REMOVED DURING REPAIR AND MAINTENANCE MUST BE PLACED IN AN UPLAND
- LOCATION OR REMOVED FROM THE PROPERTY AND IMMEDIATELY STABILIZED WITH SEED AND MULCH. ALL WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

RAIN GARDEN/BIO-RETENTION

- 1.SUB GRADE PREPARATION EXISTING SUB-GRADE IN BIO-RETENTION AREAS SHALL NOT BE COMPACTED OR SUBJECTED TO EXCESSIVE TRAFFIC FROM CONSTRUCTION EQUIPMENT.
- 2.INITIAL EXCAVATION CAN BE PERFORMED DURING ROUGH SITE GRADING. BUT SHALL NOT BE CARRIED TO WITHIN ONE (1) FOOT OF THE FINAL BOTTOM ELEVATION. FINAL EXCAVATION SHOULD NOT TAKE PLACE UNTIL ALL DISTURBED SURFACE WITHIN THE DRAINAGE AREA TO THE BIO-RETENTION AREA HAS BEEN STABILIZED.
- 3. WHERE EROSION OF SUB GRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR SURFACE PONDING IN THE GRADED BOTTOM, THIS MATERIAL MUST BE REMOVED WITH LIGHT WEIGHT EQUIPMENT AND THE UNDERLYING SOILS SCARIFIED TO A MINIMUM DEPTH OF SIX (6) INCHES WITH A YORK RAKE OR BY A LIGHT TRACTOR.

SOIL PLANTING MIX:

- THE SOIL PLANTING MIX IS A MIXTURE OF 20% TOPSOIL, 30% ORGANIC MATTER (COMPOST) AND 50% SHARP COARSE SAND. THE COMPOST COMPONENT SHALL BE MATURE, STABLE, WEED FREE, AND PRODUCED BY AEROBIC DECOMPOSITION OF ORGANIC MATTER. CLAY CONTENT OF THE BIO-RETENTION SOIL PLANTING MIX MUST BE LESS THAN 10%. THE PH OF THE BIO-RETENTION SOIL PLANTING MIX SHOULD BE BETWEEN 5.5 AND 7.5. SHOULD THE PH FALL OUTSIDE OF THE ACCEPTABLE RANGE, IT MAY BE MODIFIED WITH LIME (TO RAISE) OR IRON SULFATE PLUS SULFUR (TO LOWER). THE LIME OR IRON SULFATE MUST BE MIXED UNIFORMLY INTO THE SOIL PLANTING MIX PRIOR TO USE IN BIO-RETENTION FACILITIES. SOIL PLANTING MIX THAT FAILS TO MEET THE MINIMUM REQUIREMENTS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER. MIXING OF THE CORRECTIVE ADDITIVES TO THE SOIL
- PLANTING MIX IS INCIDENTAL AND SHALL BE AT NO ADDITIONAL COST TO THE OWNER. THE BIO-RETENTION SOIL PLANTING MIX SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS, OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES EXCLUDING MULCH - MUST NOT CONTAIN ARBITRARY FILL MATERIALS. NO OTHER MATERIALS OR SUBSTANCES SHALL BE MIXED OR DUMPED WITHIN THE BIO-RETENTION AREA THAT MAY BE HARMFUL TO PLANT GROWTH, OR PROVE A HINDRANCE TO THE PLANTING OR MAINTENANCE OPERATIONS

INSTALLATION OF VEGETATION:

- 1. SOIL PLANTING MIX SHALL BE PLACED IMMEDIATELY AFTER APPROVAL OF SUB-GRADE PREPARATION/BED INSTALLATION
- 2.INSTALL PLANTING SOIL MIX IN 12-INCH MAXIMUM LIFTS AND LIGHTLY COMPACT (TAMP WITH BACKHOE BUCKET OR BY HAND). KEEP EQUIPMENT MOVEMENT OVER PLANTING SOIL TO A MINIMUM - <u>DO NOT OVER COMPACT</u>. INSTALL PLANTING SOIL TO GRADES INDICATED ON THE CONSTRUCTION DRAWINGS.
- 3.PLANT TRESS AND SHRUBS ACCORDING TO SUPPLIERS RECOMMENDATIONS AND ONLY FROM MID-MARCH THROUGH THE END OF JUNE OR FROM MID-SEPTEMBER THROUGH MID-NOVEMBER.
- 4.INSTALL 2- 3 INCHES OF SHREDDED HARDWOOD MULCH (MINIMUM AGE 6 MONTHS) OR COMPOST MULCH EVENLY AS SHOWN ON PLANS. DO NOT APPLY MULCH IN AREAS WHERE GROUND COVER IS TO BE GRASS OR WHERE COVER WILL BE
- 5.PROTECT BIO-RETENTION/RAIN GARDENS FROM SEDIMENT AT ALL TIMES DURING CONSTRUCTION. HAY BALES, DIVERSION BERMS, AND/OR OTHER APPROPRIATE MEASURES SHALL BE USED AT THE TOE OF SLOPES THAT ARE ADJACENT TO THE BIO-RETENTION/RAIN GARDEN TO PREVENT SEDIMENT FROM WASHING INTO THESE AREAS DURING SITE DEVELOPMENT.
- 6.WATER VEGETATION AT THE END OF EACH DAY FOR TWO WEEKS AFTER PLANTING IS COMPLETED. 7.CONTRACTOR SHOULD PROVIDE A ONE-YEAR 80% CARE AND REPLACEMENT WARRANTY FOR ALL PLANTING BEGINNING AFTER INSTALLATION OF ALL PLANTS.

- EQUIPMENT SHALL AVOID EXCESSIVE COMPACTION AND/OR LAND DISTURBANCE.
- EXCAVATING EQUIPMENT SHOULD OPERATE FROM THE SIDE OF THE SWALE AND NEVER ON THE BOTTOM.
- IF EXCAVATION LEADS TO SUBSTANTIAL COMPACTION OF THE SUB-GRADE (WHERE AN INFILTRATION TRENCH IS NOT PROPOSED) 18 INCHES SHALL BE REMOVED AND REPLACED WITH A BLEND OF TOPSOIL AND SAND TO PROMOTE INFILTRATION AND BIOLOGICAL GROWTH. AT THE VERY LEAST, TOPSOIL SHALL BE THOROUGHLY DEEP PLOWED INTO THE SUB-GRADE. FOLLOWING THIS, THE AREA SHOULD BE DISKED PRIOR TO FINAL GRADING OF TOPSOIL
- FINE GRADE THE VEGETATED SWALE, ACCURATE GRADING IS CRUCIAL FOR SWALES. EVEN THE SMALLEST NONCONFORMITIES MAY
- COMPROMISE FLOW CONDITIONS. SEED, VEGETATE AND INSTALL PROTECTIVE LINING AS PER APPROVED PLANS AND ACCORDING TO FINAL PLANTING LIST.
- PLANT THE SWALE AT A TIME OF THE YEAR WHEN SUCCESSFUL ESTABLISHMENT WITHOUT IRRIGATION IS MOST LIKELY. HOWEVER, TEMPORARY IRRIGATION MAY BE NEEDED IN PERIODS OF LITTLE RAIN OR DROUGHT. VEGETATION SHOULD BE ESTABLISHED AS SOON AS POSSIBLE TO PREVENT EROSION AND SCOUR.
- ONCE ALL TRIBUTARY AREAS ARE SUFFICIENTLY STABILIZED, REMOVE TEMPORARY EROSION AND SEDIMENT CONTROLS. THE SWALE MUST BE STABILIZED BEFORE RECEIVING UPLAND STORMWATER FLOW.

REGULAR MAINTENANCE IS NEEDED INITIALLY AFTER CONSTRUCTION AND CONTINUING INSPECTION AND MAINTENANCE IS REQUIRED TO ASSURE PROPER OPERATION OF ALL BMP'S. THE CONTRACTOR MUST MAINTAIN A WRITTEN REPORT ON THE PROJECT SITE DOCUMENTING EACH INSPECTION AND ALL REPAIR OR REPLACEMENTS AND MAINTENANCE ACTIVITIES.

SHOULD ROUTINE INSPECTION REVEAL THAT A PCSM BMP IS NOT FUNCTIONING AS DESIGNED, THE OWNER MUST IMMEDIATELY TAKE ACTION TO CORRECT THE PROBLEM. STRUCTURAL FAILURES SUCH AS, BROKEN OR CLOGGED PIPES CAN BE RESOLVED BY REPLACING AND REPAIRING THE BMP TO THE ORIGINAL DESIGN (SEE PCSM BMP MAINTENANCE GUIDELINES FOR THIS PROJECT'S SPECIFIC BMP'S SHOWN BELOW). SHOULD A PCSM BMP CONSTRUCTED TO THE ORIGINAL DESIGN SPECIFICATIONS FAIL TO FUNCTION, THE OWNER MUST IMMEDIATELY CONTACT A STORMWATER DESIGN ENGINEER/PROFESSIONAL TO EVALUATE THE PROBLEM AND RECOMMEND CORRECTIONS. ANY MODIFICATION PROPOSED TO ADDRESS THE PROBLEM MUST BE SUBMITTED TO THE BLAIR COUNTY CONSERVATION DISTRICT AND DEP FOR REVIEW AND APPROVAL PRIOR TO INITIATING IMPLEMENTATION OF CORRECTIVE

IN ACCORDANCE WITH PERMIT CONDITIONS,, WHERE PCSM BMP'S ARE FOUND TO BE INOPERATIVE OR INEFFECTIVE DURING AN INSPECTION OR ANY OTHER TIME THE PERMITTEE BECOMES AWARE OF ANY INCIDENT CAUSING OR THREATENING POLLUTION AS DESCRIBED IN TITLE 25 PA CODE § 91.33, AS REQUIRED IN TITLE 25 PA CODE § 92A.41(B), THE PERMITTEE AND CO-PERMITTEE SHALL WITHIN 24 HOURS CONTACT THE DEPARTMENT OR AUTHORIZED COUNTY CONSERVATION DISTRICT BY PHONE OR PERSONAL CONTACT, FOLLOWED BY SUBMISSION OF A WRITTEN REPORT WITHIN FIVE (5) DAYS OF THE INITIAL CONTACT.

RAIN GARDEN/BIO-RETENTION

REGULAR MAINTENANCE IS NEEDED INITIALLY AFTER CONSTRUCTION AND CONTINUING INSPECTION AND MAINTENANCE IS REQUIRED TO ASSURE PROPER OPERATION OF THE BMP.

- UPON INITIAL COMPLETION OF CONSTRUCTION, INSPECT BASIN WEEKLY AND AFTER RUNOFF EVENTS OF 2" OR MORE. EVIDENCE OF EROSION, ACCUMULATED DEBRIS/SEDIMENT, AND FAILURE TO ESTABLISH A GOOD STAND OF VEGETATION IN THE BASIN MUST BE IMMEDIATELY ADDRESSED
- ROUTINE INSPECTION WILL BE CONDUCTED AT LEAST QUARTERLY AND AFTER MAJOR RUNOFF EVENTS. AS FOLLOWS —
- INSPECT AND CLEAN THE INLETS AND PIPES LEADING TO THE BASIN.
- INSPECT THE BASIN VEGETATION AND RE-SEED ANY OBSERVED BARE SPOTS.
- EVIDENCE OF EROSION MUST BE IMMEDIATELY REPAIRED.
- ACCUMULATED SEDIMENT OR DEBRIS MUST BE REMOVED AND PROPERLY DISPOSED OF.
- ADDITIONAL MULCH MUST BE REPLENISHED WHEN EROSION IS EVIDENT. EVERY TWO (2) TO THREE (3) YEARS INSPECT ENTIRE MULCH LAYER COMPLETELY REPLACE IF NEEDED OR SUPPLEMENT ONLY THE AREAS NEEDING REPLACEMENT MULCH LAYER.
- INSPECT THE OUTLET STRUCTURES FOR EROSION, DAMAGE, AND STABILITY. REPAIR AS NEEDED.
- MOW AND TRIM VEGETATION TO ENSURE SAFETY, AESTHETICS, PROPER OPERATION, AND TO SUPPRESS INVASIVE VEGETATION AND WEEDS. MOW ONLY WHEN DRY TO AVOID RUTTING.
- SHOULD THE BASIN STILL HAVE PONDED WATER 3 DAYS AFTER A PRECIPITATION OR THAWING EVENT, FURTHER INVESTIGATION MUST BE CONDUCTED TO INSPECT FOR CLOGGED OUTFALL DEVICES, UNDERDRAINS, PIPES, OR SPILLWAYS AND REPAIR AS

PIPE DETENTION/INLETS/PIPING:

- INSPECT PIPE DETENTION, INLETS, AND PIPES AT ACCESS POINTS. ACCUMULATED SEDIMENT/DEBRIS MUST BE REMOVED AND PROPERLY DISPOSED OF.
- IF FULL OF DEBRIS/SEDIMENT, INLET SUMPS SHALL BE CLEANED OUT MECHANICALLY OR VIA VACUUM TRUCK.
 ACCUMULATED SEDIMENT/DEBRIS MUST BE REMOVED AND PROPERLY DISPOSED OF.
- DAMAGED INLETS AND PIPES SHALL BE REPAIRED OR REPLACED AS NECESSARY.

SHOULD SHALE BEDROCK BE EXPOSED DURING EXCAVATION THE FOLLOWING STEPS MUST BE TAKEN:

NOTIFY THE GEOTECHNICAL ENGINEER-OF-RECORD (GER) IMMEDIATELY IF DECOMPOSED, WEATHERED AND/OR INTACT SHALE BEDROCK IS ENCOUNTERED. THE GER SHALL VISIT THE SITE WITHIN 24 HOURS TO DETERMINE IF ADDITIONAL LABORATORY TESTING (TOTAL SULFUR AND NEUTRALIZATION POTENTIAL) IS WARRANTED. ADDITIONAL COMMUNICATION BETWEEN THE SITE CIVIL ENGINEER, THE GER AND THE PADEP WILL BE REQUIRED TO REVIEW ANY LABORATORY RESULTS AND TO DETERMINE THE MOST APPROPRIATE REMEDIAL PROGRAM, IF WARRANTED.

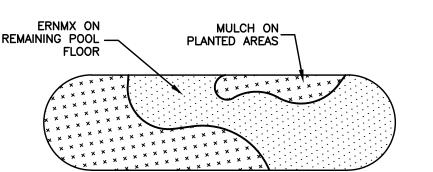
PROFESSIONAL CERTIFICATION:

UPON COMPLETION OF THE PROJECT AND SUBMISSION OF THE REQUIRED NOTICE OF TERMINATION (NOT) THE RECORD DRAWINGS SHALL INCLUDE THE FOLLOWING EXECUTED CERTIFICATION, WITH THE PROFESSIONAL'S SEAL:

DO HEREBY CERTIFY PURSUANT TO THE PENALTIES OF 18 PA.C.S.A. § 4904 TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THAT THE ACCOMPANYING RECORD DRAWINGS ACCURATELY REFLECT THE AS-BUILT CONDITIONS, ARE TRUE AND CORRECT, AND ARE IN CONFORMANCE WITH CHAPTER 102 OF THE RULES AND REGULATIONS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THAT THE PROJECT SITE WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PCSM PLAN, ALL APPROVED PLAN CHANGES AND ACCEPTED CONSTRUCTION PRACTICES."

OWNERSHIP/OPERATION/MAINTENANCE:

ALTOONA ADC PROPERTIES ASSOCIATES, LLC IS THE OWNER OF THIS DEVELOPMENT, AND IT, (OR ITS DESIGNATED APPOINTEES), WILL BE RESPONSIBLE FOR THE DAY TO DAY OPERATION AND MAINTENANCE OF THE PERMANENT FACILITIES AND WILL BE ULTIMATELY RESPONSIBLE FOR LONG-TERM MAINTENANCE OF THE PERMANENT STORMWATER BMP'S. UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF THE PERMANENT VEGETATION, THE BIO-RETENTION AREAS SHALL BE INSPECTED BE INSPECTED AND REPAIRED AS NEEDED ACCORDING TO THE ABOVE NOTES.



SCHEMATIC BIORETENTION PLAN

A LICENSED PROFESSIONAL SHALL OVERSEE CONSTRUCTION OF THE RAIN GARDENS. CRITICAL STAGES SHALL BE DEFINED AS: 1. WHEN THE SHAPE AND DEPTH OF THE

- RAIN GARDEN IS GRADED. 2. WHEN THE STONE LAYERS AND OUTLET STRUCTURE ARE BEING INSTALLED.
- 3. WHEN THE SOIL MIX IS BEING
- INSTALLED. 4. WHEN THE PLANTINGS ARE COMPLETE.

LANDSCAPING LEGEND

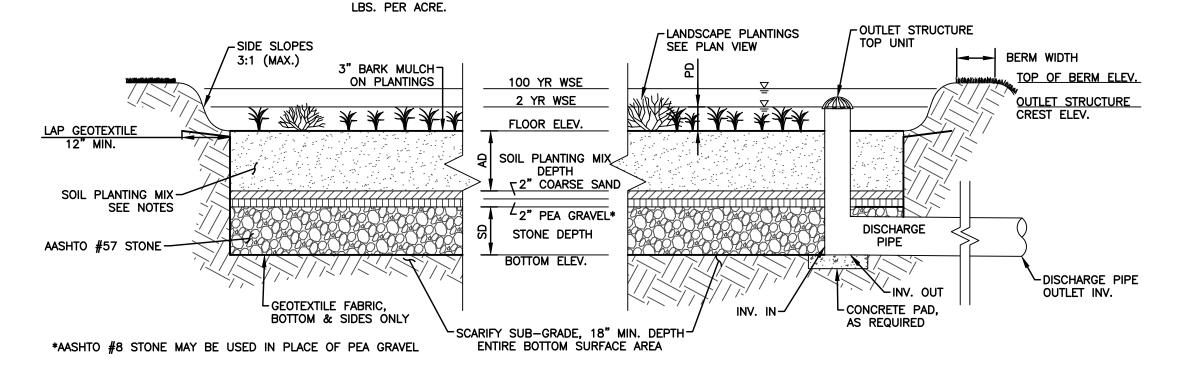
KEY	QUANTITY	BOTANICAL NAME COMMON NAME	SIZE	CONDITION
PS	7	PINUS STROBUS WHITE PINE	6' HT	B&B
AA	13	AMELANCHIER ARBOREA DOWNY SERVICEBERRY (TREE FORM)	NOTE 3	B&B
СС	10	CERCIS CANADENSIS 'FOREST PANSY' FOREST PANSY EASTERN REDBUD (TREE FORM)	NOTE 3	B&B
GT	8	GLEDITSIA TRIACANTHOS 'SKYLINE' THORNLESS HONEY LOCUST	NOTE 3	B&B
	PS AA CC	PS 7 AA 13 CC 10	PS 7 PINUS STROBUS WHITE PINE AA 13 AMELANCHIER ARBOREA DOWNY SERVICEBERRY (TREE FORM) CC 10 CERCIS CANADENSIS 'FOREST PANSY' FOREST PANSY EASTERN REDBUD (TREE FORM)	PS 7 PINUS STROBUS WHITE PINE 6' HT AA 13 AMELANCHIER ARBOREA DOWNY SERVICEBERRY (TREE FORM) NOTE 3 CC 10 CERCIS CANADENSIS 'FOREST PANSY' FOREST PANSY EASTERN REDBUD (TREE FORM) NOTE 3

EP	21	ECHINACEA PURPUREA PURPLE CONEFLOWER	18" HT.	CONT.
НА	4	HYDRANGEA ARBORESCENS SMOOTH HYDRANGEA	24" HT.	CONT.
IS	8	ILEX GLABRA 'SHAMROCK' COMPACT INKBERRY	24" HT.	CONT.
PV	14	PANICUM VIRGATUM 'ROTSTRAHLBUSCH' RED SWITCHGRASS	18" HT.	CONT.
LS	29	LEUCANTHEMUM X SUPERBUM 'ALASKA' SHASTA DAISY (LARGE, SINGLE)	18" HT.	CONT.
LP	19	LUPINUS PERENNIS BLUE LUPINE	18" HT.	CONT.
HP	21	HYPERICUM PROLIFICUM SHRUBBY ST. JOHNSWORT	24" HT.	CONT.
JC	5	JUNIPERUS COMMUNIS COMMON JUNIPER	24 HT.	CONT.
PF	27	POTENTILLA FRUTICOSA SHRUBBY CINQUEFOIL	24" HT.	CONT.
MD	22	MONARDA DIDYMA RED BEEBALM	18" HT.	CONT.
RA	23	RHUS AROMATICA 'GRO LO' LOW GROW FRAGRANT SUMAC	6" HT.	CONT.
CS	24	CORNUS SERICEA 'KELSEYI' DWARF REDOSIER DOGWOOD	18" HT.	CONT.
IV	29	IRIS VERSICOLOR BLUE FLAG	12" HT.	CONT.
IG	12	ILEX GLABRA INKBERRY	48" HT.	B&B
		RAIN GARDEN GRASS MIX (ERNMX 180-1). DO NOT THAN 1 TIME PER MONTH.	MOW MORE	SEED
	HA IS PV LS LP HP JC PF MD RA CS IV	HA 4 IS 8 PV 14 LS 29 LP 19 HP 21 JC 5 PF 27 MD 22 RA 23 CS 24 IV 29	PURPLE CONEFLOWER HA 4 HYDRANGEA ARBORESCENS SMOOTH HYDRANGEA IS 8 ILEX GLABRA 'SHAMROCK' COMPACT INKBERRY PV 14 PANICUM VIRGATUM 'ROTSTRAHLBUSCH' RED SWITCHGRASS LS 29 LEUCANTHEMUM X SUPERBUM 'ALASKA' SHASTA DAISY (LARGE, SINGLE) LP 19 LUPINUS PERENNIS BLUE LUPINE HP 21 HYPERICUM PROLIFICUM SHRUBBY ST. JOHNSWORT JC 5 JUNIPERUS COMMUNIS COMMON JUNIPER PF 27 POTENTILLA FRUTICOSA SHRUBBY CINQUEFOIL MD 22 MONARDA DIDYMA RED BEEBALM RA 23 RHUS AROMATICA 'GRO LO' LOW GROW FRAGRANT SUMAC CS 24 CORNUS SERICEA 'KELSEYI' DWARF REDOSIER DOGWOOD IV 29 IRIS VERSICOLOR BLUE FLAG IG 12 ILEX GLABRA INKBERRY RAIN GARDEN GRASS MIX (ERNMX 180-1). DO NOT	EP 21

1. NON-BIORETENTION PLANTING AREAS SHALL RECEIVE WEED BARRIER FABRIC AND 3" OF SHREDDED BARK MULCH (COLOR: CHOCOLATE).

2. ALL PLANT MATERIALS SHALL MEET THE SPECIFICATIONS OF THE AMERICAN ASSOCIATION OF NURSERYMEN FOR NO.

3. ALL TREES SHALL BE 2" IN DIAMETER AT A POINT MEASURED 4' FROM THE GROUND. 4. ALL PLANT MATERIAL SHALL BE MAINTAINED AND REPLACED IF THE REQUIRED VEGETATION IS DAMAGED, DISEASED, CUT, OR DIES. 5. RAIN GARDEN MIX SHALL BE SEEDED AT 15 LBS. PER ACRE WITH A COVER CROP OF GRAIN RYE SEEDED AT 30



RAIN GARDEN" SCHEDULE:						
BIORETENTION AREA	Α	B1	B2	С	D	E
OP OF BERM	1145.50	1145.00	1145.00	1145.50	1145.00	1142.00
BERM TOP WIDTH	5.0'	5.0'	5.0'	5.0'	5.0'	5.0'
ONDING DEPTH (PD)	6" MAX.	12" MAX.	6" MAX.	6" MAX.	6" MAX.	12" MAX.
OIL PLANTING MIX DEPTH (AD)	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'
STONE DEPTH (SD)	1.17'	1.17'	1.17'	1.17'	1.17'	1.17'
OUTLET STRUCTURE TOP UNIT	DOME	DOME	DOME	DOME	DOME	N/A
OUTLET STRUCTURE TYPE	12" DRAIN BASIN	6" DRAIN BASIN	6" DRAIN BASIN	12" DRAIN BASIN	6" DRAIN BASIN	5' SPILLWAY
OUTLET STRUCTURE CREST ELEV.	1145.00	1141.75	1144.50	1145.00	1144.50	1140.50
00 YR WATER SURFACE ELEV.	1145.21	1144.83	1144.59	1145.39	1144.58	1140.65
YR WATER SURFACE ELEV.	1145.12	1142.72	1144.50	1145.23	1144.19	1139.63
LOOR ELEV.	1144.50	1140.75	1144.00	1144.50	1144.00	1139.50
BOTTOM ELEV.	1141.50	1136.50	1141.00	1141.50	1141.00	1136.50
INDERDRAIN PIPE	N/A	N/A	N/A	N/A	N/A	N/A
NV. IN - UNDERDRAIN PIPE	N/A	N/A	N/A	N/A	N/A	N/A
NV. OUT - DISCHARGE PIPE	1141.50	1136.50	1135.75	1141.50	1140.00	N/A
ISCHARGE PIPE OUTLET INV.	1141.10	1135.85	1135.50	1140.10	1139.50	N/A
MERG. SPILLWAY CREST (RISER)	N/A	N/A	N/A	N/A	N/A	1138.75
MERG. SPILLWAY LINING	N/A	N/A	N/A	N/A	N/A	NAG S75

SOIL PLANTING MIX NOTES:

1. SOIL PLANTING MIX TO GENERALLY CONSIST OF: A. 20% GOOD QUALITY TOPSOIL. UNSATISFACTORY TOPSOIL MATERIALS ARE DEFINED AS THOSE CONTAINING HIGH CLAY COMPOSITION, TRASH. DEBRIS. ROCKS, OR FROZEN MATERIAL. GOOD QUALITY

TOPSOIL MAY OR MAY NOT BE AVAILABLE ON SITE. B. 30% GOOD QUALITY COMPOST. THE PURPOSE OF THE COMPOST COMPONENT IS TO INCREASE ORGANIC CONTENT OF THE SOIL PLANTING MIX MIXTURE TO PROMOTE PLANT MATERIAL GROWTH UPON THE BASIN BOTTOM. DO NOT USE BIO-SOLID COMPOST MIXTURE SOURCES: DO NOT USE COMPOST SOURCES WITH HIGH CLAY CONTENT OR PARTICULATES.

C. 50% CLEAN WASHED SAND. THE PURPOSE OF THE SAND COMPONENT IS TO LOOSEN THE OVERALL SOIL PLANTING MIX MIX TO PROMOTE INFILTRATION.

D. LIME ANTI-FLOCCULATION AGENT AS DIRECTED BY PROJECT SOIL E. A 3" LAYER OF 1/4" CLEAN WASHED ANTI-SKID MATERIAL MAY BE

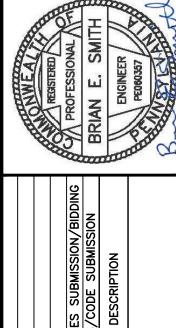
PLACED ON THE BOTTOM OF THE RAINGARDEN IN LIEU OF THE GEOTECHNICAL FABRIC. 2. FINAL SOIL PLANTING MIX MIXTURE COMPONENTS AND COMPOSITION

SHALL BE DETERMINED BY PROJECT SOIL SCIENTIST BASED ON ON-SITE TEST MIXTURE PREPARATION AND INFILTRATION TESTING. 3. PROCURE, MIX, STORE, AND PLACE SOIL PLANTING MIX IN ACCORDANCE WITH POST CONSTRUCTION STORMWATER MANAGEMENT

4. PLACE SOIL PLANTING MIX LOOSE IN 8" LIFTS ON BASIN SUBGRADE, STARTING AT LOWEST END OF BASIN. DO NOT PLACE SOIL PLANTING MIX IN STANDING WATER. DO NOT COMPACT. AVOID RUNNING EQUIPMENT ON COMPLETED BASIN BOTTOM.

GINEER





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BIORETENTION ("RAIN GARDEN")